Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

January 28, 1957

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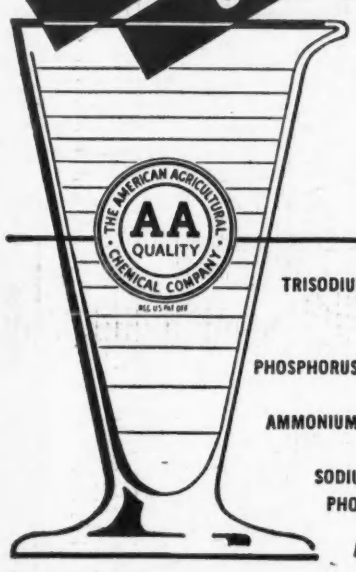

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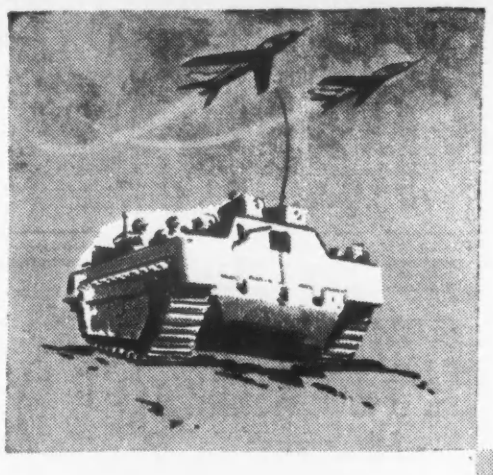

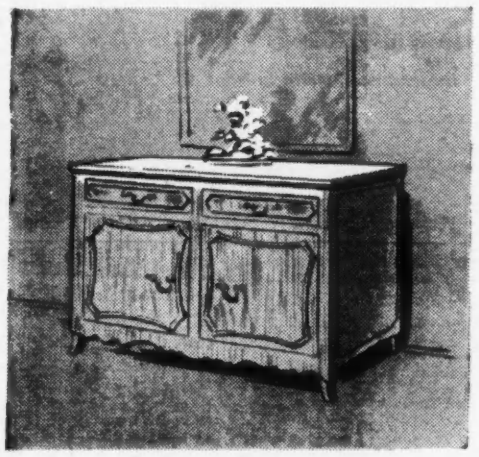

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Oil, Paint and Drug Reporter

Vol. 171 No. 4 30 Church St., New York 7, N. Y. January 28, 1957

Offshore Hearing Set

The Supreme Court of the United States has set April 8 as the date for oral arguments on the boundary dispute between the federal government and Louisiana involving the oil-rich submerged lands of the Gulf of Mexico.

The immediate question before the court is whether to decide the issue promptly or hold a full-dress review of the historical facts relating to the boundary.

Louisiana claims that its historical boundary extends three leagues seaward from the low-water mark or a distance of about ten and one-half miles, while the government insists that Louisiana's jurisdiction ends at the three-mile mark.

Because of the location of some of the islands in the Gulf, the Louisiana boundary could extend as much as 120 to 180 miles beyond the mainland.

The area involved is a potential rich source of revenue to both the state or the federal government because of oil and sulfur deposits indicated in surveys.

The Department of Justice has moved for quick action by the court on the issue so that development work, which has been held in abeyance because of the dispute, can get underway.

Meanwhile, oil operations on the outer continental shelf area off Louisiana have been quickly resumed under the interim agreement reached between the state and the federal government last October 12, Secretary of the Interior Fred A. Seaton said.

The agreement established the terms under which oil and gas operations could be resumed on the offshore lands in the Gulf pending final settlement by the supreme court of the boundary dispute. On January 1, 272 leases had been brought under the terms of the agreement and 104 new drilling permits on these leases had been issued.

Butadiene Plant Bill Reported; Would Permit Highest-Bid Sale For General Chemical Use

Government aims to rid itself of its last remaining synthetic rubber facility—the alcohol-butadiene plant at Louisville, Ky.—received a big push in congress last week. The house armed services committee voted unanimously to report the Vinson bill, HR 2528, authorizing sale of the plant to the highest bidder for general chemical use. The action came immediately on the heels of brief hearings at which only government representatives were asked to testify. They said that the plant is no longer needed in the production of synthetic rubber, either now or in the foreseeable future, and from the taxpayers' standpoint, it is best that it be sold while the chemical industry is still in the process of expanding, and willing to pay a good price for it.

Brownell Criticizes One Section of Bill

The only note of objection heard was from the Attorney General, who criticized one section of the bill. This is a section that would require the Federal Facilities Corporation to obtain the approval of the Attorney General to a contract of sale before the contract is submitted to congress for its review.

Attorney General Brownell advised the committee that he did not believe that he should be given the responsibility of blocking or permitting the sale. The most that he should be called on to do, he said, is to give advice on whether the proposed sale would conflict with the antitrust laws. The final say on whether the sale should be made should rest with the Federal Facilities Corporation and congress, he added.

Just before reporting the bill to the house floor for passage, the committee amended it to conform to the Attorney General's suggestion.

The principal change in law being made by the Vinson bill in connection with the Louisville plant is to do away with a requirement that the plant remain within the scope of the synthetic rubber industry when it is sold by requiring that any purchaser use at least a part of the facilities to produce butadiene. Instead, the

—Continued on page 67

SALES MANAGER: Robert C. Brumberger, named manager of chemical industry sales for Nuodex Products Company, a division of Heyden Newport Chemical Corporation, New York.

Chemicals Will Sell Even Better In 1957, Says Johnson of BDSA

The sales of US chemical producers this year should be about 6 percent higher than they were last year, says Dr. Hal G. Johnson, director of the chemical and rubber division of the Business and Defense Services Administration. And last year's total sales were at a record of $24.3 billion, Dr. Johnson pointed out today in his division's "Chemical and Rubber Industry Report" for January.

Dr. Hal G. Johnson

He added, however, that part of next year's advance will be attributable to increased prices resulting from higher costs.

Sales of rubber products in 1957 are expected to better the previous high of $5.5 billion reached in 1955, according to the report.

Capital Outlays to Rise 19 Percent

Capital outlays by chemical manufacturers for new plant and equipment are expected to reach $850 million in the first half of 1957 and about $1,750 million for the year. A good part of this 19 percent increase over 1956 expenditures is expected to reflect higher prices for materials and rising costs for installations of automatic processing equipment.

It is anticipated that chemical production in 1957 will exceed the 1956 peak by close to 4 percent.

A moderate degree of inventory buildup is expected in the first half of 1957 to match the anticipated high volume of sales. However, much of the stock buildup will be due to rising prices of raw materials.

Competition for domestic and foreign markets will be much keener in 1957 with increasing stress placed upon efficiency through technological advance, diversification of products, and greater productivity, as a means of gaining better competitive position, the report continued.

Upward pressures will be exerted on chemical wholesale prices in 1957 due to

—Continued on page 35

Sulfur Pilot Works Projected in Canada

International Nickel Company of Canada, Ltd., has concluded an agreement with Texas Gulf Sulphur Company, New York, for the operation of a pilot plant at Copper Cliff, Ont., to investigate processes for the recovery of elemental sulfur from sulfur dioxide-bearing gases, according to Ralph D. Parker, vice-president of Inco and general-manager of its Canadian operations.

This latest development, stemming from Inco's program of metallurgical research, continues a pattern of long-range projects which first resulted in the production of sulfuric acid, then made possible the production of liquid sulfur dioxide from

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Narcotic Returns May Now Be Made in Metric Weights

Manufacturers of taxable narcotic drugs may render their quarterly returns in terms of metric weight beginning with any convenient month, provided an additional set of summaries (quarterly and cumulative) is prepared in ounces and grains and included with each return for the use of the Bureau of Narcotics.

So states a letter to manufacturers of taxable narcotic drugs from H. J. An-

—Continued on page 55

Chemical Concentration Study Will Be Continued

A study of economic concentration in the chemical industry, which has been under way for several months by a subcommittee of the senate judiciary committee, will be continued in the present session of congress, Sen. Estes Kefauver of Tennessee made it known last week.

As chairman of the antitrust and monopoly subcommittee, which has been conducting the study, Sen. Kefauver told the senate rules committee that his group would need at least $300,000 to finance its activities this year; the principal activity being the study of the extent of economic concentration, industry by industry, of which the chemical industry study is a part. However, the committee authorized

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Ethylene Glycol Unit Slated for Louisiana

Calcasieu Chemical Corporation, New Orleans, La., will own an $11 million petrochemical plant to be constructed at Lake Charles, La. The facility will be engineered, built and operated for Calcasieu by Petroleum Chemicals, Inc. The plant will produce ethylene oxide and ethylene glycol, using, as raw material, ethylene supplied by Petroleum Chemicals.

Announcement was made jointly by R. E. Brooker, president of Calcasieu, and Bruce K. Brown, president of Petroleum Chemicals. Mr. Brooker is vice-president of Sears, Roebuck & Co., Sears being one of the stockholders of Calcasieu.

Other stockholders are Mineral Solvents Company of Chicago and Cities Service Companies and Continental Oil Company.

The Calcasieu plant, which will be capable of producing 8 million gallons per annum of ethylene glycol, will be located immediately adjacent to the ethylene plant now under construction by PCI. The ethylene plant will obtain the refin-

—Continued on page 41

Celanese Resin Plant On Stream in Feb.

Celanese Corporation of America, New York, has announced that its new 40-million-pound-a-year plant for making polyolefin resins near Houston, Tex., will be on stream next month. A semi-works unit has been in operation for some time.

Celanese said a new resin, called "Fortiflex," will open up entirely new fields for plastics and is capable of substantially improving the qualities of many existing items. The resin, made under license from Phillips Petroleum Company, is an ethylene polymer and a member of a new group of plastics sometimes referred to as "low-pressure polyethylene."

FDA Takes Action to Ban Four Coaltar Dyes

The Food and Drug Administration last week took initial action to ban the use of four coaltar colors in foods or drugs taken internally. Formal notice was published in the *Federal Register* January 24 that the colors will be deleted from the list of approved colors for foods, drugs and cosmetics for external application.

The four colors involved in the proceedings are FD&C Yellow Nos. 1, 2, 3 and 4. Color manufacturers, food processors, and all other interested persons have thirty days in which to file written comments on the proposed regulation. Based on such comments FDA may then issue a final order or set a hearing date to receive further evidence.

The agency said that there have been no reports of any injurious effects on humans from any of the four colors involved, but animal studies indicate that excessive amounts of these colors could cause injury. The law requires that an approved coaltar color must be "harmless," regardless of how much is used, it was stated.

Only small amounts of Yellow No. 1 have been certified by FDA, and most of this color is reported to be sold for export, FDA said.

Although Yellow No. 2 is listed as a permitted color, no lots have been certified, and it apparently is not being used.

Yellows No. 3 and No. 4 are extensively used in coloring butter, oleomargarine, and other food items.

FDA also published two proposed revisions of the definition of a coaltar color as it appears in the color certification regulations. The first of these is the proposal of the Commissioner of Food and Drugs to exempt from certification carbon black, caramel, and a number of colors derived from vegetable sources.

A counter proposal offered by Hoff-

—Continued on page 51

'Good Faith' Legislation Seen Acted on Quickly by Congress

The Patman-Kefauver bills (HR 11 and S 11) to rule out "good faith" as a complete defense in price discrimination charges last week appeared headed for early consideration in congress and possible passage by both the house and senate this session. Activity surrounding the measure began to develop almost immediately following the inauguration of President Eisenhower for his second term January 21.

Meeting for the first time this session to organize and set up its subcommittee, the judiciary committee of the senate, which has jurisdiction over this legislation, named Sen. Estes Kefauver of Tennessee head of its subcommittee on antitrust with authority to start action on the bill at any time he chooses. Sen. Kefauver announced no immediate plans for the Patman-Kefauver bills, but committee aids said that they expect that the legislation will be given top priority.

Four Have Names on Bill

This expectation was supported by the later disclosure that four of the seven members of the subcommittee on antitrust have their names on the bill. Together with Mr. Kefauver, the bill is being sponsored by the following subcommittee members: Senators Joseph O'Mahoney of Wyoming, William Langer of North Dakota, and Alexander Wiley of Wisconsin. The three uncommitted members of the subcommittee are Senators Thomas C. Hennings of Missouri, Matthew Neely of West Virginia, and Everett Dirksen of Illinois.

With a majority of the subcommittee already openly supporting the measure, the job of industry opponents has been made doubly difficult. It would appear that they will have to train their arguments on the full judiciary committee if the bill is to be defeated or kept from reaching the senate floor.

Up until the present time, opponents have been focusing their attention on the house judiciary committee where the companion bill of Rep. Wright Patman of Texas has been thought ready to be rammed through without hearings. The mounting opposition has upset these plans, however, and a subcommittee of the house judiciary committee is now studying the advisability

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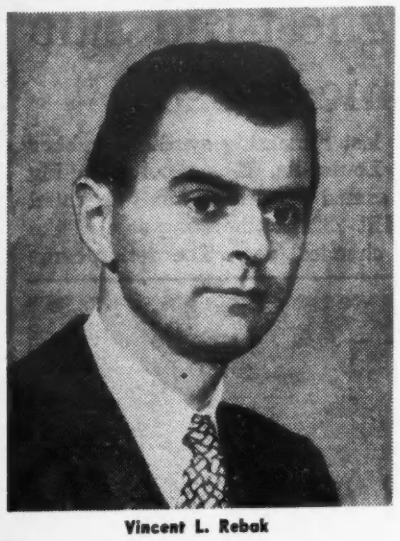


Vincent L. Rebak

Chemical Salesmen Install 1957 President

Vincent L. Rebak, New York district sales manager for Grace Chemical Company, a division of W. R. Grace & Co., New York, was inducted last week as the 1957 president of the Salesmen's Association of the American Chemical Industry. The installation took place at a luncheon meeting in the Commodore hotel, New York.

Robert J. Roberts of Emery Industries, Inc., took office as SAACI's vice-president. James E. Spencer of Harshaw Chemical Company is the new association treasurer, while George W. Poland, jr., of E. M. Sergeant Pulp & Chemical Company will serve as secretary of the organization for the coming year.

Installed as SAACI directors for two-

—Continued on page 41

Dow Plastics Material Goes Into Full-Scale Production

Full-scale commercial production of "Styrex 767," a plastic material based on styrene and acrylonitrile, has been announced by Dow Chemical Company, Midland, Mich.

"Styrex," first introduced on a limited scale in mid-1956, is being produced in a new plant at Dow's Midland Division. "Styrex 767" is a rigid thermoplastic which can be readily molded or extruded.

Manganese Lands Granted Vanadium Corp. in Africa

Vanadium Corporation of America, New York, has been granted a large additional manganese concession in Northern Rhodesia by British South Africa Company.

The concession, designated as the Chihili East Manganese Area, comprises about 2,460 square miles. The agreement gives Vanadium Corporation the exclusive right to prospect and stake claims for manganese on property adjacent to a 200-square-mile manganese concession which Vanadium purchased in September, 1955.

Geological work on the new concession will be under the direction of the wholly-owned subsidiary, Rhodesian Vanadium Corporation, which operates chrome ore as well as managanese properties in Southern Rhodesia.

The Week's Price Changes

Aliphatic Solvents, Penicillin, Barium Carbonate Advance. Platinum, Egg Albumin, Myrobalans and Waxes Decline.

Prices Advanced

Acid, linseed, 1/10c. per lb. (p. 61).
Aliphatic solvents, ½c. per gal. on west coast, 1½c. per gal. in Ohio, 1c. per gal. elsewhere (p. 40).
Barium carbonate, $4 per ton (p. 34).
Blood, New York, 25c. per unit-ton (p. 39).
Chicago, 25c. per unit-ton.
Chestnut, ex., solid, 60%, 0.205c. per lb. (p. 38).
powder, 70%, 0.225c. per lb.
Dihydrostreptomycin, 1c. per gram. (p. 49).
Oil, almond, 15c. per lb. (p. 56).
Castor, dom., ½c. per lb. (p. 61).
Linseed, 1/10c. per lb. (p. 61).
Nutmeg, 50c. per lb. (p. 56).
Penicillin, 1½c. per million units (p. 49).
Streptomycin, 1c. per gram (p. 49).
Tankage, New York, 25c. per unit-ton (p. 39).
Chicago, 50c. per unit-ton.
Tin, 1½c. per lb. (p. 34).
Salts, ½c. to 6/10c. per lb. (p. 34).

Prices Reduced

Copra, $1.50 per ton (p. 61).
Egg albumin, flake, 5c. per lb. (p. 38).
Greases, ¼c. per lb. (p. 61).
Lard, cash, 1/10c. per lb. (p. 61).
Linseed meal, $1 per ton (p. 61).
Myrobalans, gen., J 1, $2 per ton (p. 38).
Bombay, $3 per ton.
Oil, citronella, Ceylon, 3c. per lb. (p. 56).
Coconut, crude, ⅛c. per lb. (p. 61).
Cottonseed, crude, ½c. per lb. (p. 61).
refd., ½c. per lb.
Grapefruit, 5c. per lb. (p. 56).
Palm, ¼c. per lb. (p. 61).
Peanut, crude, 1½c. per lb. (p. 61).
refd., 1½c. per lb.
Soybean, crude ¼c. per lb. (p. 61).
refd., ¼c. per lb.
Tung, ½c. per lb. (p. 61).
Peanut meal, old proc., $1 per ton (p. 61).
Solv., $2 per ton.
Platinum, $5 per oz. (p. 34).
Tallow, ined., ¼c. per lb. (p. 61).
Wax, bees, Afr., crude, 1c. per lb. (p. 61).
Carnauba, yellow, Phyba, 4c. per lb. (p. 61).
Japan, 1c. per lb. (p. 61)

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

Jan. 25, 1957	Jan. 18, 1957	Jan. 27, 1956
111.14	111.01	107.34

Sodium Molybdate on Market

Climax Molybdenum Company is now supplying sodium molybdate and has stocks available to meet the anticipated needs of fertilizer manufacturers, agricultural chemicals distributors and other industrial consumers, according to George L. Innes, Climax manager of chemical sales. The material, available as the crystalline technical grade, can be obtained through the Climax headquarters office, New York. The base price is 76 cents per pound, delivered, in quantities of 3,000 pounds or more, with extras for smaller quantities. The product assays 97 percent minimum sodium molybdate dihydrate ($Na_2MoO_4.2H_2O$) and 38.4 percent minimum molybdenum.

The principal reason for the Climax decision to market sodium molybdate, a molybdenum chemical it has not previously supplied, is the growing agricultural demand for it, especially in the Pacific Northwest, Mr. Innes stated. Applied to molybdenum-deficient soils, sodium molybdate makes available the essential plant nutrient molybdenum.

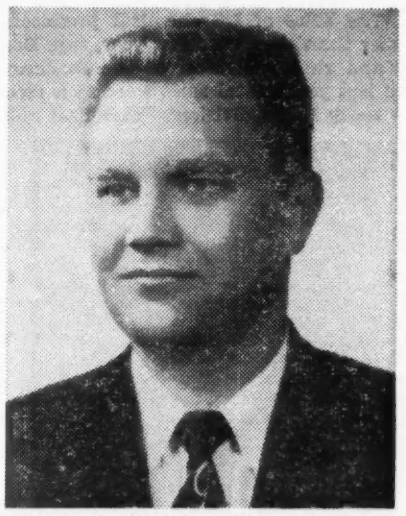
Last year, Mr. Innes reported, farmers in the Washington-Idaho pea-growing sections known as the Palouse country and Camas Prairie treated over 5,000 acres of peas with sodium molybdate, and reported average in yield of 50 percent and a net increase in gross income of $35 an acre.

—Continued on page 53

Octyl, Decyl Alcohols Added to Alcolac Line

American Alcolac Corporation, Baltimore, Md., is adding two new products, octyl and decyl alcohols, to its line. The company is currently a producer and processor of higher fatty alcohols so that, with these additions, Alcolac will be handling the entire range from octyl through to stearyl alcohols.

Company officers point out that apart from the customary octyl-decyl mixtures, it will be turning out close cuts of both the C_8 and C_{10} products.



TECHNICAL SERVICE CHIEF: H. Russell Spielman, appointed manager of its technical service department by Witco Chemical Company, New York.

Air Reduction Elects

George E. Hawkins, vice-president of Air Reduction Company, Inc., New York, has been elected executive vice-president of the company. Mr. Hawkins joined the company in 1917, has been vice-president since 1941, and a director since 1949.

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AIC MEDALIST FOR 1957: Dr. Roy C. Newton, vice-president of Swift & Co., Chicago, who will receive the 1957 gold medal of the American Institute of Chemists at its annual meeting in Akron, Ohio, in May.

Purchasing Agents' Optimism Continues

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

There are indications that the optimism which purchasing executives expressed for 1957, in their December comments, may have the beginning of its confirmation in the January reports.

New orders have shown a moderate upturn, with 32 percent saying that their position is improved. This compares with 24 percent who reported a better new order position in December. The number reporting a decline in new orders has dropped from December's 31 percent to 23 percent in January. Production remains high and 28 percent say it is better than December. However, there are many who still believe the current situation should be tempered with caution. Spotty situations still exist both geographically and in certain industries.

Our special question this month asked if the higher inventories of purchased materials reported in December, which are again confirmed this month, were intentional or the result of a drop in new orders and production. The majority of purchasing executive (59 percent) thought the company overall inventories were about right, while 30 percent believed them to be too high and only 8 percent too low. In a few cases, inventories were believed to be unbalanced, being too low on some items and too high on others.

A renewal of price increases and further inflation worry many. The attempt to keep the costs of purchased materials down so that their companies will be in a good competitive position in the markets

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Glycerine Association Is Told Its Main Task in Coming Year Is To Hold, Extend Markets

The chief problem of the coming year for glycerine producers will be how to hold and extend all of glycerine's markets, particularly in the field of surface coatings. So stated E. Scott Pattison, manager of the Glycerine Producers Association, before the 1957 annual convention of the Association of American Soap and Glycerine Producers at the Waldorf-Astoria hotel, New York, last week. The approach to new markets will be positive and realistic, Mr. Pattison said, as new producers turn more and more to characteristics of the product itself—for their faith in its future.

"The possibilities of research, and the education as to glycerine's properties that underlies it will seem brighter as the need to 'go fundamental' grows," he said. 'The idea that the problems of glycerine disposition will all be solved passively by soapmaking's decline is no longer tenable."

Increasing Price Stability

Mr. Pattison dealt at some length with the increasing stability of glycerine price patterns during the past few years. "For three years now," he pointed out, "we find that refined glycerine for spot buyers as well as that sold on contract has been available within a 10 percent cost range."

"We have held our place poundwise, but probably not percentagewise, with the development of the more specialized polyols and modifications of alkyd formulations," Mr. Pattison said.

"As a humectant and plasticizer in cellophane and tobacco, glycerine continues to hold its place. Combined as mono and diglycerides in emulsifiers and food additives, glycerine has made good gains.

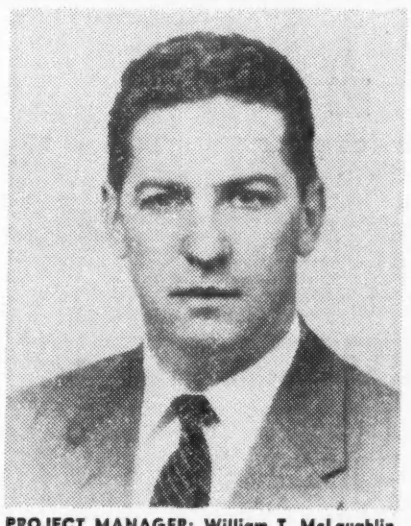
"Explosives are another story, both because of glycol substitution and a trend from nitroglycerine to ammonium nitrate for mining use. In the toilet goods field, it is difficult to establish a trend. Hundreds of new and specialized ingredients have no doubt gained relatively to the old basic formulations in which glycerine was so widely used, for reasons of novelty, if no other."

Mr. Pattison pointed out the contradictory opinions of glycerine industry forecasters. "There are those who see natural glycerine supply outside the United States rising faster than glycerine demand for, say, the next five years ahead."

However, he indicated, "Others who have totalled up the construction of new plants to produce detergents abroad reach an opposite conclusion. And, of course, those who put the possibility of war in the equation would add another 75 million pounds a year or so to present US capacity for glycerine-making."

Research in petroleum chemicals or fat chemicals is not lagging in Europe, R. H.

—Continued on page 53



PROJECT MANAGER: William T. McLaughlin, appointed project manager for commercial development by Pittsburgh Coke & Chemical Company, Pittsburgh, Pa.

Eastman Adds Polyethylene Units

Texas Eastman Company, a division of Eastman Kodak Company, has increased its capacity for the production of "Tenite" polyethylene. W. S. Vaughn, president of Eastman Chemical Products, Inc., which markets the products of Texas Eastman Company as well as those of Tennessee Eastman Company, said, "With the installation of additional polyethylene production equipment at the Longview, Tex., plant, annual capacity has now been increased to 55,000,000 pounds."

This is the second substantial increase in the capacity of its Texas plant to be announced by Eastman since commercial deliveries of "Tenite" polyethylene plastic resin were begun late in 1954. As recently as February, 1956, the company made public the fact that work on additional facilities then in progress would raise the output of its manufacturing unit to an annual rate of 40 million pounds later that year.

During 1956, sizable installations were

—Continued on page 52

FDA Stands Pat On Additives Bill, But Will Bargain

Food and Drug Administration, which is now circulating a draft of its own control bill among government agencies, says it would like to sit down with industry to iron out differences on the food additives question. But it shows no inclination of budging from any of its previously stated views.

So it would appear from an address delivered last week in New York by John L. Harvey, deputy commissioner of FDA, before the food, drug and cosmetic law section of the New York State Bar Association.

If FDA has changed on the type of procedure it wants set up for judicial review, that was not evident from Mr. Harvey's remarks.

Need for Workable System Cited

Reminding the drug lawyers that a workable system must be devised, he contented himself with restating the opposing positions on the matter.

The government agency has already gone on record as favoring an administrative type of enforcement under which an additive could not be used in food until it had first been approved by the Secretary of Health, Education and Welfare.

Under the industry plan, the courts would have the final say on the safety of an additive via a declaratory judgment provision.

As for chemicals that are already being used in foods, Mr. Harvey said:

"We have no objection to the continued employment of chemicals that through long usage have become generally recognized by experts as safe. Salt, vinegar and numerous other well-known chemicals would fall in this category."

"But," he added, "we are opposed to a blanket grandfather clause that would permit the use for an indefinite period of all additives now employed, because some of them are not generally recognized by experts as safe.

"We think it would be improper to sanction the indefinite use of an inadequately tested chemical simply because it has been used in the past.

"We think it would be proper to give industry a reasonable time after legisla-

—Continued on page 37

General Chemical Plans Aluminum Sulfate Plant

General Chemical Division of Allied Chemical & Dye Corporation, New York, plans to build a new plant for the production of liquid aluminum sulfate at Port St. Joe, Florida.

The plant's output will go primarily for paper manufacture in the area, for which liquid aluminum sulfate is a principal process material. With the addition of this unit, General Chemical will have twenty-four such plants from coast to coast.

Nat'l Adhesives Is Erecting English Polymerization Unit

National Adhesives, Ltd., the English affiliate of National Starch Products, Inc., is erecting a polymerization plant in Slough, England.

According to Ronald M. L. Francis, managing director, the new plant is expected to begin operation in March. It is planned to produce polymers of vinyl acetate for use in the packaging, paper, textile, coating and paint fields. Facilities will also be provided for the production of formulated resin adhesives.

Included in the construction is the erection of a new laboratory to house the expanded development, service and control facilities.

Upon completion of the polymerization unit, a new adhesive manufacturing plant and office building will be erected to replace the present units which have been in use for many years.

National Starch also operates polymerization plants at Plainfield, N. J., and Meredosia, Ill.

American Potash Buys National Northern Corp.

American Potash & Chemical Corporation, Los Angeles, has purchased National Northern Corporation, which will carry on the ordnance and explosive research, development and testing business known as the National Northern Division of National Fireworks Ordnance Corporation at West Hanover, Mass.

Activities carried on by National Northern's staff of fifty scientists and technicians include laboratory studies, pilot production and field testing of explosives, pyrotechnics, propellants, detonators, fuses and related items for the military services and commercial customers.

DuPont Announces Three Top Management Shifts

E. I. duPont de Nemours & Co., Wilmington, Del., has named Walter H. Salzenberg assistant general manager of its polychemicals department, effective February 1. He will succeed Dr. J. A. Almquist who will retire from that post on that date.

Replacing Mr. Salzenberg on the first as assistant general manager of the Grasselli chemicals department will be Dr. Wallace E. Gordon, now director of duPont's advertising. Frederick A. C. Wardenburg, director of sales for the pigments department, will become director of the advertising department on February 1.

Intercontinental Purchases Control of Carbic Color

Intercontinental Chemical Corporation, New York, a subsidiary of Farbwerke Hoechst AG., Frankfurt-Hoechst, Germany, has purchased the majority interest in Carbic Color & Chemical Company, New York. Carbic will continue, with its present staff, to sell the present Carbic line of dyestuffs and will add imported dyestuff specialties of Farbwerke Hoechst AG.

Chemurgy Crash Program Again Offered in Congress

A crash program of agricultural research, aimed at discovering sufficient new or expanded industrial uses for farm products to wipe out the problem of agricultural surpluses, has again been proposed in congress. The sponsor of the program is Sen. Homer Capehart of Indiana who, with thirty-four other senators, advocated a similar plan last session but too late for action.

The Capehart bill (S.724), heads up the research program under an Industrial Agricultural Products Administration with powers broad enough to carry out the objectives of the program. The administration's functions could extend all the way from basic research to commercial manufacture.

A fund of $100 million would be appropriated annually to meet the expenses of the program.

Other bills of interest to the chemical industry introduced recently include the following:

Contracts—HR3021 by Rep. A. S. Carnahan of Missouri to authorize the payment of fair compensation to persons contracting to deliver certain strategic or critical minerals or metals in cases of failure to recover reasonable costs.

Depletion—HR3105 by Rep. Richard M. Simpson of Pennsylvania, to prevent discrimination against fiscal-year taxpayers with respect to depletion allowances.

FTC—S721 by Sen. John J. Sparkman of Alabama, to amend section 11 of the Clayton act to provide for the more expeditious enforcement of cease-and-desist orders.

Gasoline prices—HRes 108 by Rep H. R. Gross of Iowa, creating a select com-

—Continued on page 45

Schering Laboratory Is Dedicated in N.J.

A medical biological research laboratory costing more than $1.5 million has been dedicated at Bloomfield, N. J., by Schering Corporation.

Nearly 100 research scientists will work in the new research building in the fields of biochemistry, pharmacology and veterinary medicine.

CSC NITROPARAFFINS

NITROMETHANE
CH_3NO_2

NITROETHANE
$CH_3CH_2NO_2$

1-NITROPROPANE
$CH_3CH_2CH_2NO_2$

IMPROVING PROCESSES AND PRODUCTS

2-NITROPROPANE
$CH_3CHNO_2CH_3$

2-AMINO-2-METHYL-1-PROPANOL
$CH_3C(CH_3)NH_2CH_2OH$

TRIS (HYDROXYMETHYL) AMINOMETHANE
$(CH_2OH)_3CNH_2$

FOR AMERICA'S MAJOR INDUSTRIES

2-AMINO-2-METHYL-1, 3-PROPANEDIOL
$CH_2OHC(CH_3)NH_2CH_2OH$

HYDROXYLAMMONIUM ACID SULFATE
$NH_2OH \cdot H_2SO_4$

ALKATERGES

Nitroparaffins and their derivatives are economical, effective, versatile chemicals for such uses as solvents . . . prime ingredients . . . raw materials . . . sensitizers . . . emulsifiers . . . analytical reagents . . . reducing agents . . . inhibitors . . . short-stoppers . . . surface activants . . . dispersants . . . anti-foamants.

In a relatively short time, the members of the nitroparaffin family found wide use in many important industries.

New groups of derivatives are being studied continually for new and profitable applications. Steadily increasing quantities of these unusual chemicals are being shipped from CSC's plant in Sterlington, La.

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IN CANADA: Reliance Chemicals, Ltd., Montreal. IN MEXICO: Comsolmex, S.A., Mexico 11, D. F.

CSC
INDUSTRIAL CHEMICALS

Association Meetings

Chemical Buyers' Group, National Association of Purchasing Agents, midwinter meeting, eastern division, Commodore hotel, New York, January 29. National Pest Control Association, Purdue pest control operators conference, Purdue University, West Lafayette, Ind., January 28-February 1; southern pest control operators conference, Louisiana State University, Baton Rouge, La., January 28-30.

American Coke and Coal Chemicals Institute, regional meeting, Drake hotel, Chicago, February 7.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Institute of Chemists, annual meeting, Sheraton-Mayflower hotel, Akron, Ohio, May 22-24.

American Pharmaceutical Manufacturers' Association, central section meeting, Edgewater Beach hotel, Chicago, February 11-13; western section meeting, Ambassador hotel, Los Angeles, February 18-19; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 27-29.

American Society of Perfumers, symposium on fragrance, Essex House, New York, March 20.

American Society for Testing Materials, annual committee week and spring meeting, Benjamin Franklin hotel, Philadelphia, February 4-8.

Association of Consulting Chemists & Chemical Engineers, luncheon meeting, Chemists' Club, New York, February 5; banquet and symposium, Belmont Plaza hotel, New York, April 24; annual meeting, Belmont Plaza hotel, New York, October 22.

Chemical Market Research Association, Sheraton hotel, Philadelphia, March 12-13.

Chemical Progress Week, April 8-12.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22.

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28; resort meeting, French Lick, Ind., May 13-14.

Council for Agricultural and Chemurgic Research, annual chemurgic conference, Congress hotel, Chicago, March 26-28.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual dinner, Waldorf-Astoria hotel, New York, March 7; annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Federal Wholesale Druggists' Association, midyear meeting, Statler hotel, New York, March 7-9.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Flavoring Extract Manufacturers' Association, annual convention, Roosevelt hotel, New York, May 19-22.

Manufacturing Chemists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8.

National Agricultural Chemicals Association, spring meeting, Fairmont hotel, San Francisco, March 6-8.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6.

National Plant Food Council, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13.

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Penn-Sheraton hotel, Pittsburgh, Pa., March 4-8.

Proprietary Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., May 12-15.

Society of Plastics Industry, annual conference and Pacific Coast plastics exposition, Shrine Exposition Hall, Los Angeles, March 18-21.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, February 14; annual outing, Skytop Lodge, Skytop, Pa., May 26-28.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 7-9.

Chlorine Industry Progressing 8-10 Percent a Year in Tonnage, Cremers Tells Trade Group

The chlorine industry is progressing at the rate of 8 to 10 percent per year in its tonnage output, while current estimates of the replacement value of present manufacturing facilities reach $1,080,000,000, Bert Cremers, vice-president of Wyandotte Chemicals Corporation, Wyandotte, Mich., declared last week following his re-election as president of the Chlorine Institute, at the annual meeting in New York.

The meeting also saw the election of W. H. McConnell, vice-president of Diamond Alkali Company, Cleveland, Ohio, as vice president of the organization, and the re-election of Robert T. Baldwin as secretary-treasurer.

In pointing out the size of the industry, Mr. Cremers said that chlorine manufacturing is now demanding 11 billion kilowatts of power annually, which is one-fiftieth of the total electrical energy output of the nation.

Chlorine Output in 1924

"In 1924 when the Chlorine Institute was formed," Mr. Cremers said, "total US production was about 400 tons per day, and the industry had a capacity of 725 tons a day. We closed 1956 with a daily production of 10,200 tons—an increase of 2,500 percent over 1924, and a rated production capacity of 10,900 tons a day.

"With several producers already constructing additional capacity and other plants scheduled for completion by the end of 1958, the industry will have 1,500 additional tons per day. With construction material and labor costs rising steadily, we estimate that it now costs $100,000 per daily ton of chlorine production capacity to bring in what is needed to meet the demands of industry, public bodies and other users for this product which has so many uses contributing to health and many other services of benefit to the people," Mr. Cremers went on.

"Although much of the activity of some more important chemical research laboratories of the nation is devoted to development of improved chemicals which use chlorine as a base material, sanitation continues to be one of our industry's greatest responsibilities.

"While by no means the largest single use for chlorine, the colossal demand for water is now at an average of at least 140 gallons per capita per day. The country is nearer than it was a year ago to drastic water saving projects such as recovery of potable water from sewage and the desalting of sea water. These developments will materially increase the use of chlorine.

"The Chlorine Institute estimates that the consumption of chlorine for sanitation

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Bert Cremers

Petroleum Chemicals Plans Butyl Facility

A plant to produce butyl rubber will be built by Petroleum Chemicals, Inc., at Lake Charles, La., according to Bruce K. Brown, president, who stated that an initial plant capacity of 30,000 tons a year would be installed at an investment cost of over $17 million, and that capacity could easily be expanded by 50 percent at at a later date.

Mr. Brown stated that while butyl rubber was first manufactured for the government during World War II, and mainly for automobile tire inner tubes, later many other uses were developed for the product as a general purpose rubber. Recently it has been proven that automobile tires made of butyl have several real advantages over tires made from either natural rubber or other synthetics, Mr. Brown said.

The Petroleum Chemicals plant will be the first one built since the war. Its operation will increase national productive capacity for butyl rubber by about one-third, and Mr. Brown said it was hoped

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Mineral Production Hit Peak Of $17.3 Billion During Past Year

Mineral production in the United States last year reached a new peak of $17.3 billion, or a gain of more than $1 billion over 1955 and more than $3 billion over 1954, the Bureau of Mines reported last week. Petroleum was in the lead. It had a total value of $7.3 billion, which amounted to a rise of $500 million from the previous year. Fuels values rose 11 percent, compared with a 10 percent gain for other non-metals and 9 percent for metals. The increase for metals was due mainly to greater output of copper, lead and zinc.

Offsetting the general upswing were drops in production and value for such metals as chromite, iron ore, manganese ore, molybdenum, silver and tungsten.

Other highlights of 1956 reported by the bureau were:

- Reserves of nuclear fuel appear ample. Domestic uranium ore reserves were estimated at about 60 million tons as of November 1. The ratio of private to government drilling for uranium increased from ten to one in 1955 to 200 to one in 1956 and is expected to continue in that direction.
- Production of titanium sponge metal nearly doubled during the year and substantial price reductions were achieved. Domestic aluminum output also reached a new high.
- Strong demand drove the price of copper to a ninety-year high of 46 cents

—Continued on page 66

Dr. Herbert J. Dutton

Agriculture Chemist Gets Glycerine Award

Dr. Herbert J. Dutton, Department of Agriculture research chemist, has won first award of $1,000 and an honor plaque in the 1956 Glycerine Research Awards, it was announced last week by the Glycerine Producers' Association. The association makes these awards annually in recognition of new and independent research contributing to knowledge and use of glycerine.

Dr. Dutton's award-winning accomplishment was the application of a recently developed extraction technic to investigate complex natural glycerides such as linseed oil. His work is a major breakthrough in developing new and significant

—Continued on page 41

Consulting Chemists to Meet

The Association of Consulting Chemists and Chemical Engineers will hold an informal luncheon meeting February 5 at the Chemists' Club, New York, at noon. Dr. Eugene W. K. Schwarz, a member of the association, will deliver a paper on "Synthetic Fibers."

Aluminum Ass'n Makes Den Uyl Its President

S. D. Den Uyl, president of Bohn Aluminum & Brass Corporation, was elected president of the Aluminum Association at the annual meeting in New York last week.

Arthur V. Davis, chairman of the board of Aluminum Company of America, Miami, Fla., was elected honorary chairman of the board. Everett G. Fahlman, president of Permold Company, who served as president of the association for the past two years, was elected chairman of the board. George A. Ginsburg, secretary, United Smelting & Aluminum Company; David P. Reynolds, vice-president, Reynolds Metals Company, and Harry L. Smith, jr., vice-president, Aluminum Company of America, were reelected directors-at-large, each to serve three-year terms.

Three vice-presidents were elected: Russel B. Caples, president, Anaconda Aluminum Company; W. E. Dunlap, president, Aluminum Extrusions, Inc., and Frank R. Nichols, president, Nichols Wire & Aluminum Company.

Pharmacists Fete Schaefer, Set Up Fund in His Name

Over 600 pharmacists and representatives of pharmaceutical firms and organizations were guests last week at a testimonial dinner honoring Dr. Hugo H. Schaefer and marking his retirement as dean of Long Island University's Brooklyn College of Pharmacy after two decades of service.

Members of the pharmaceutical profession honoring Dr. Schaefer at the dinner paid permanent tribute to him by establishing the "Hugo H. Schaefer Endowment Fund" to be used to expand the research program, services and facilities at Brooklyn College of Pharmacy, to build a radioisotope laboratory at the college and to advance pharmaceutical education in general.

APMA Western Unit Sets February Meeting Plans

The western section of the American Pharmaceutical Manufacturers' Association has readied the program for its meeting to be held February 18 and 19 in the Ambassador hotel, Los Angeles.

The program will start with a reading of papers on atherosclerosis by Drs. George C. Griffith and Willard J. Zinn, of the University of Southern California. These will be followed by a paper on "Experimental Approach to Brain Function," by Dr. Thomas J. Haley, atomic energy scientist.

The luncheon speaker will be George Murphy, of Metro-Goldwyn-Mayer motion picture studios. In the afternoon the following papers will be presented: "Chemical Genetics and Radiation Sickness," by Dr. George W. Beadle, of the division of biology of California Institute of Technology; "Safety in Pharmaceutical Manufacturing and Its Effect on Insurance Rates," by Clinton A. Sullivan, of Liberty Mutual Insurance Company, and "Press Coating of Compressed Tablets," by K. Hollidge, of Arthur Colton Company.

The program for the morning of the second day will feature the following papers: "Physics of Tablet Compression and Practical Application," by Dr. Eino Nelson, of the College of Pharmacy of the University of California; "Motivating Salesmen," by Tyler MacDonald, of Hixson & Jorgensen, and "Export Problems," by Richard Steuben, of Cutter Laboratories, International.

This will be followed by a luncheon at which Dr. Joseph Kaplan, of the University of California, will speak.

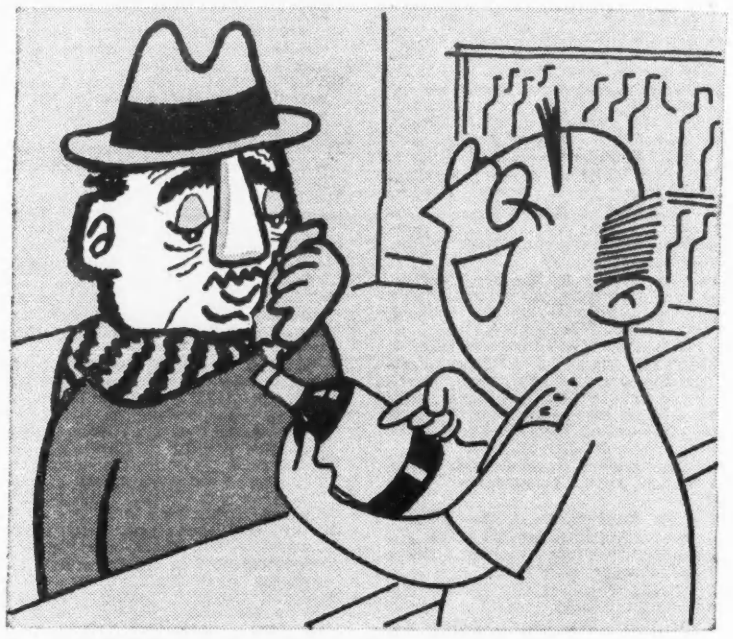
The afternoon papers will include "Let's Stand on Our Feet—Not Tread on Each

—Continued on page 66

The Satisfied Consumer

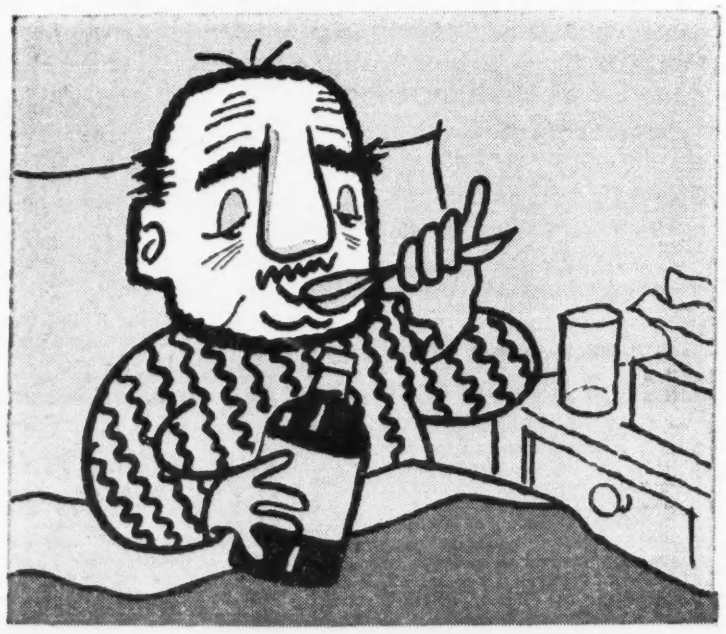
CANDIDATE FOR PYRILAMINE MALEATE

Pyrilamine answers important needs for antihistamine therapy because of outstanding effectiveness and compatibility with a variety of other pharmaceuticals.



"SURE IT'S GOOD—THOUSANDS USE IT"

Pyrilamine is the most favored antihistamine, employed in more formulations and by more manufacturers than any other antihistamine today.



ROAD TO RECOVERY

Pyrilamine is a superior antihistamine. It is remarkably well tolerated, the occurrence of drowsiness in particular being notably low.

THE SATISFIED CONSUMER

And you, too, will be satisfied with Pyrilamine, whether formulated in cold tablets, cough syrups, nasal preparations, ointments, lotions or creams. Check your Merck representative for the details.

PYRILAMINE MALEATE MERCK

builds acceptance for antihistamine formulations

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, January 25 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic)
Acenaphthene below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
l.c.l., works lb. .13½- —
tanks, works lb. .10 - —
Acetaldol (see Aldol).
Acetanilide tech. flaked, bbls., bgs., c.l., frt. alld lb. .30½- —
ton lots lb. .31½- —
smaller lots lb. .34½- —
USP, bbls., 2,000-lb. lots lb. .79 - —
smaller lots lb. .80 - .81
Acetic anhydride, aluminum ret., dms., c.l., dlvd. E lb. .15½- —
l.c.l., dlvd E lb. .17 - —
tanks, dlvd E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib dms., c.l., dlvd 1.3(- —
l.c.l., dlvd lb 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP dms., c.l., dlvd... lb. .10½- —
l.c.l. dlvd lb. .11½- —
tanks, dlvd lb. .08 - —
Methyl (see M)
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt equald lb. 1.17 1.19
Acetophenone, cns., dms lb. 1.21 1.85
tech., dms., l.c.l., works lb. 75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 1.85
Acetyltributyl citrate, tech., non-ret. dms. c.l., frt alld. E of Denver lb. .36 - —
l.c.l., frt. alld. E of Denver lb. .35 - —
tanks frt alld E of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret dms., c.l., frt. alld. E of Denver lb. .39 - —
l.c.l. frt alld E of Denver. lb. .40 - —
tanks, frt alld E of Denver. lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490- —
cryst., dms. c.l., works lb. .06½- —
l.c.l., works lb. .07 - .07⅛
Acetic coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 8.25 - —
70% bbls 100 lbs. 9.95 - —
80% bbls 100 lbs. 10.45 - —
glacial syn. CP. dms., dlvd. 00 lbs. 22.00 -23.00
tech. dms. c.l. dlvd 100 lbs. 13.75 - —
l.c.l. dlvd. 100 lbs. 14.25 - —
tanks, dlvd 100 lbs. 10.00 - —
USP cbys. inclusive, dlvd., 100 lbs. 31.00 -32.00
Acetic anhydride (see Acetic anhydride above)
Acetylsalicylic, USP, special. makers, primary distrib., bbls. 1,000-lb lots, point of shipt lb. .61 - —
standard fine cryst. gran., (30-40 mesh) powd (80 mesh) bbls 1,000-lb lots. same basis lb. .56 - .58
Freight equald, shipt identical quantity over standard routes from N. Y., Phila., Midland, Mich., Chicago and St. Louis
Adipic, bgs., c.l. dlvd lb 32 - —
l.c.l., dlvd lb 34¾- —
Aminoacetic NF bbls., frt adjusted lb 1.50 1.75
p-Aminobenzoic tech. dry, dms., works lb 1.74 1.77
USP dms. 1,000-lb lots or more, works lb. 2.60 - —
smaller lots, works lb. 2.65 - 2.75
p-Aminosalicylic, dms. 100 lbs or more, frt. adjusted lb 3.70 —
Anthranilic 99%, 150-lb dms., dlvd lb. 1.15 - —
Arsenous tech (see Arsenic, white)
USP (see Arsenic trioxide)
Ascorbic USP dms 25-100 kilo lots kilo 12.00 - —
10-kilo lots kilo 12.35 - —
5-kilo lots kilo 12.75 - —
bots 1-kilo lots kilo 13.00 - —
500-gram lots kilo 13.50 - —
Battery, cbys., c.l., works, E. 100 lbs 2.35 — —
l.c.l. works E 100 lbs 2.65 3.45

Acacia—Acid, Itaconic

Acid, benzoic, tech., bbls., dms., 100-lb lots or more lb. .44 - —
USP, bbls. dms. 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton. 129.00 - —
ton lots, ex whse., N. Y. or Chi ton. 184.25 - —
smaller lots, same basis. ton. 189.25 - —
dms., c.l., works ton. 153.50 -173.50
ton lots, ex whse., N. Y. or Chi ton. 208.75 -228.75
smaller lots, same basis. ton. 213.75 -233.75
gran., bgs., c.l., works ton. 104.00 - —
ton lots, ex whse., N. Y. or Chi ton. 159.25 - —
smaller lots, same basis. ton. 164.25 - —
dms., c.l., works ton. 128.50 -148.50
ton lots, ex whse., N. Y. or Chi ton. 183.75 -203.75
smaller lots, same basis. ton. 188.75 -208.75
bulk, c.l., works ton. 98.00 - —
Acid boric, tech., 99.9% powd., bgs., c.l., works ton. 109.00 - —
ton lots, ex whse., N. Y. or Chi ton. 159.25 - —
smaller lots, same basis. ton. 164.25 - —
dms., c.l., works ton. 133.50 -153.50
ton lots, ex whse., N. Y. or Chi ton. 188.75 -208.75
smaller lots, same basis. ton. 193.75 -213.75
USP boric acid $25 per ton higher.
Broenners, bbls lb 1.76 —
Butyric, 99%, dms., c.l., frt. equald. lb. .34 - —
l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Capric, dms lb 25 .27
Caprylic, dms lb. 25 .27
Cassella dms. frt. alld., 100% basis lb 1.44 1.75
Castor oil, dms lb. .17¾- .19¾
Chicago paste bbls. frt. alld lb 3.21 —
Chloroacetic mono purif., flake, 99% dms lb. 23½- 25½
tech. flake 96-97%, dms., frt. equald lb. 20 .21
o-Chlorobenzoic, fib dms., t.l., works lb 1.10 —
smaller lots, works lb. 1.25 —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	divd.	delivered	No.	number
anhyd.	anhydrous	dms.	drums	nom.	nominal
a.p.a.	available phosphoric acid	dom.	domestic	o-	ortho
approx.	approximately	E.	east	ord.	ordinary
artif.	artificial	e.p.	end point	oz.	ounce
ASTM	American Society for Testing Materials	equald.	equalized	p-	para
		exp.	expressed	Pac.	Pacific
Atl.	Atlantic	F	fahrenheit	pf	proof
Be.	Baume	ferment.	fermentation	phos.	phosphate
bbls.	barrels	f.f.a.	free fatty acid	photo.	photographic
bgs.	bags	f.f.c.	free from chlorine	pkgs.	packages
bls.	bales	fib.	fiber	powd.	powdered
bots.	bottles	f.o.b.	free on board	precip.	precipitated
b.p.	boiling point	f.p.a.	free of prussic acid	prod.	producer
b.p.l.	bone phosphate of lime	frt.	freight	pt	point
b.r.	boiling range	gal.	gallon	pulv.	pulverized
bxs.	boxes	gran.	granular	purif.	purified
C.	centigrade	grd.	ground	redist.	redistilled
cbys.	carboys	I.&a.	iron and aluminum	refd.	refined
CD	completely denatured	i.b.p.	initial boiling point	refy.	refinery
c.i.f.	cost insurance, freight	imp.	imported	reg.	regular
cks.	casks	incl.	included	resub.	resublimed
c.l.	carlots	indust.	industrial	ret.	returnable
cns.	cans	kgs	kegs	SD	specially denatured
coml.	commercial	l-	laevo	s d	single distilled
conc.	concentrated	lacq.	lacquer	S E.	southeast
CP	chemically pure	lb	pound	sec.	secondary
cps.	centipoises	l.c.l.	less than carlots	secs.	seconds
cryst.	crystal	l.t.l.	less truckload	s.g.	specific gravity
cs.	cases	liq.	liquid	ship't	shipment
ctns.	cartons	mfrs.	manufacturers	soln.	solution
cyls.	cylinders	m-	meta	s u	standard unit
d-	dextro	m.a.p.	mixed aniline point	syn.	synthetic
dbl.	double	min.	minimum	tanks.	railroad tankcars
denat.	denatured	m.p.	melting point	tech.	technical
dest-dist	destructive-distilled	N-	nitrogen	tert-	tertiary
dl-	dextro-laevo	n-	normal	t.l	truck loads
dist.	distilled	nat.	natural	t.w	tank wagons
		neut.	neutral	USP	U S Pharmacopoeia
		NF	National Formulary	vis.	viscosity
				VM&P	varnish makers & painters
				W	west
				whse.	warehouse
				w w	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, p-chlorobenzoic, fib. dms., 2,000 lbs. or more, works lb 2.25 - —
less than 2,000 lbs., same basis. lb 2.30 - —
Chlorosulfonic, dms., c.l., frt. equald lb. .0465- —
l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.
Chromic, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
l.c.l., dlvd. N. Y., Metropolitan area lb. .30 - .31
NF (see Chromium trioxide).
Cinnamic, refd., bots lb 2.50 3.50
Citric, USP, anhyd., gran., fine gran., bgs., dms., c.l. lb. .29½ .30
10,000-lb lots, 1 shipt. lb. .30 .30⅛
smaller lots lb. .30½- .31
hydrous, gran., fine gran., bgs., dms., c.l lb. .27½- .28
10,000-lb lots, 1 shipt. lb. .28 .28⅛
smaller lots lb. .29 .29⅛
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. 1.05 - —
Coconut oil, dist., dms lb 25 .27
tanks lb 23 - —
dbl dist., dms lb. 25 .27
tanks lb 23 .24
Corn oil, dist., dms lb. .16¾- .18⅛
tanks lb. .14¾- —
Cottonseed oil, dist., dms lb. .15¾ .17⅛
tanks lb. .13¾- —
2,3-Cresotic, dms., ton lots, works. lb. 70 - —
smaller lots, works lb. .72 - —
Cresylic, coaltar, dom., resin and tricresyl phosphate grade, 50%, 207° or above, tanks, frt. equald. gal. 1.10 - —
204° to 207° C., tanks, frt. equald gal. 1.10 - —
non-resin grade, 50%, 210° or above, total range over 9° C., dms., c.l., frt. equald. gal. 1.15 - —
l.c.l., frt equald gal 1.19 - 1.20
tanks, frt. equald gal. 1.00 - —
Imp. 75% at 215° C. or over, dms., ex whse gal. 95 - —
petroleum, dom., 195° to 214°C., non-ret dms., 65 to c.l., works, San Francisco and Los Angeles gal. 80 - —
l.c.l. same basis gal. 82 - .84
tanks, same basis gal. .65 - —
200° C to 222° C., tanks, Wilmington, Cal lb. 65 .73
211° C to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. 76 - —
l.c.l. same basis gal. 78 - .80
tanks, same basis gal. 61 - —
220° C to 242° C., tanks, Wilmington, Cal lb. 62 .67
245° C to 295° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic, fib dms., 200 lbs. or more, works lb. .50 - —
Cyanoacetic, tech. bbls lb. .90 1.25
Dichlorophenoxyacetic (see 2,4-D)
Diethylbarbituric (see Barbital)
Diglycolic bgs. works lb. .14 - —
Dithiodibenzoic dms., 1,000-lb lots, works lb 1.45 - —
2-Ethyl hexoic, dms., c.l., dlvd. lb .37 - —
l.c.l. dlvd lb .38 - —
tanks, dlvd lb .34½- —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns., kilo-lots or more gram. 1.40 - —
Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775
Fumaric tech. bgs., dms., c.l., frt. alld, E lb. .27 - —
l.c.l., same basis lb. .28 - —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Gallic NF VII bbls. 1,000-lb lots lb. 2.00 - —
smaller lots lb. 2.02 - 2.22
tech., bbls., 1,000-lb. lots lb. 1.78 - —
smaller lots lb. 1.80 - 2.00
Gamma dry grd. bbls. frt. alld lb 1.50 —
paste bbls frt alld lb 1.45 —
Gluconic, tech., 50%, bots., works, lb. .25 - 1.16
non-ret. dms., c.l., works lb. .15½- —
1-dm. lots, works lb .16 - —
l-Glutamic 99½% fib dms., 100-lb. lots, frt. alld lb. 2.00 - —
25-lb. lots, frt. alld lb. 2.05 - —
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., frt. alld., 100% basis lb 1.00 —
l.c.l. same basis lb 1.02 —
Hydriodic, 1.50 s.g. cbys lb 2.94 —
1.70 s.g., cbys lb 3.23 —
Hydrobromic, medicinal, 48%, cbys., dlvd E lb. .37 .43
Hydrochloric, anhyd (see Hydrogen chloride).
18° cbys. c.l., works 100 lbs. 2.50 —
l.c.l. dlvd., Metropolitan area 100 lbs 2.90 3.05
tanks works frt. equald ton. 28.00 —
20° cbys., c.l., works 100 lbs 2.75 —
l.c.l. dlvd Metropolitan area 100 lbs 3.15 —
tanks, works, frt. equald ton. 30.00 —
22°, cbys. c.l., works 100 lbs 3.25 —
l.c.l. dlvd., Metropolitan area 100 lbs 3.65 —
tanks, works, frt. equald ton. 35.00 —
CP, USP consumers, cbys., extra, c.l., works lb. .15¾- —
l.c.l., same basis lb. .17¼- .17⅞
5-pint bots, extra, cs., c.l., same basis lb 20¾- —
t.c.l. same basis lb. .22¼- .23¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb less.
Hydrocyanic, cyls, c.l. dlvd lb. .70 —
l.c.l., same basis lb. .75 - .90
dilute NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs. 19.25 - —
l.c.l., l.t.l., dlvd 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
l.c.l., l.t.l., dlvd 100 lbs. 22.50 - —
tanks, works, frt. equald. 100 lbs. 15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic, dms. works, 30% basis lb. .06 —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks Belle, W Va., 100% basis lb. .095 —
Hypophosphorous, purif., 50%, cbys lb 1.30 1.32
USP, cbys. lb. .88 —
Isonicotinic, 100-lb fib dms., works lb. 4.25 —
Hydrazide (see Isoniazid).
Itaconic, tech., fib. dms., c.l., works lb. .44 - —
l.c.l., works lb. .45 - —
purif., fib, dms., c.l., works lb. .54 - —
l.c.l., works lb. .55 - —

Acid J—Alcohol, n-Butyl

Acid, J, paste, bbls., works, 100% USP 85% chys. lb .85 .88
basis lb 2.45 —
powd bbls., same basis lb 2.50 2.85
Koch, bbls. frt alld, 100% basis. lb 1.00 —
L, bulk, works lb 1.25 —
Lactic, edible, 50%, bbls., 20 or more lb. .1821- .215
smaller lots lb .1921- .225
80%, bbls., 5 or more lb. .3121- .37
smaller lots lb. .3171- .375
plastic grade 50%, bbls., 20 or more works lb .23 —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech. 22% bbls. c.l., works 100 lbs 6.30 - —
t.c.l. works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs. 12.20 —
44%, bbls., c.l., works 100 lbs 11.45 - 11.95
t.c.l. works 100 lbs 11.85 - 12.35
Laurent's, bbls lb .60 —
Lauric, 90% dms lb. .36½ .36½
Linseed oil, dist., dms lb. .1980- w.w., dms lb. .2280- —
Maleic cryst. powd. dms lb .37 .38
Malic, tech., dms lb. 50 —
Mandelic NF dms. 1,000-lb lots lb 2.35 —
smaller lots lb 2.40 2.50
Metanilic dms. works lb .57 75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .47 - —
smaller lots, works lb. .47½- .50
tanks, works lb. 45 - —

Acid, molybdic, 85%, dms., works lb. 1.20 - —
Monochloroacetic purif (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb .26 - .28
1-naphthol-4 sulfonic (see Acid, Neville and Winthers)
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic 2-amino (see Acid, J).
Naphthol sulfonic mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's)
2,Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid Tobias).
Nevile and Winther's, dms., frt alld lb. 1.30 - —
Nicotinic USP dms., dlvd kilo 8.00 8.30
Amide, USP (see Nicotinamide).
Nitric 36° Be chys. c.l., works, E 100 lbs 5.75 —
t.c.l. works E 100 lbs 6.05 6.85
38° Be chys. c.l., works, E 100 lbs 6.25 —
t.c.l. works E 100 lbs 6.55 7.35
40° Be. chys., c.l., works, E 100 lbs 6.75 - —
t.c.l. works E 100 lbs 7.05 7.85

Acid, nitric, 42° Be, chys., c.l., works E 100 lbs. 7.25 - —
t.c.l., works, E 100 lbs 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
t.c.l., same basis lb. .20 - .20½
5-pt. bots., extra, cs., c.l., same basis lb. .22½- —
t.c.l., same basis lb. .24 - .25
p-Nitrobenzoic, dms., c.l., works. lb. .72 - —
t.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .18½- .20½
tanks lb. .16½- —
dbl. dist. (white) dms. lb. .20½- .22½
tanks lb. .18½- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls. c.l., works lb .16½- —
10,000-lb lots, works lb. .16¾- —
smaller lots, works lb. .17¾- —
b-Oxynaphthoic, fib dms, 250 lbs. or more, frt. alld lb 1.14 1.17
Palm dist., dms lb. .14¾- .16¾
tanks lb. .12¾- —
Para aminobenzoic (see Acid, p-Aminobenzoic).
Para aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid p-Chlorobenzoic).
Paramethylphenylcinchonic (see Neocinchophen).
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid p-toluidine-m-sulfonic).
Peri, dry, frt. alld. lb. 1.35 - —
paste, frt. alld. lb. 1.30 - —
Phenylacetic, pure, cryst., cns. lb 1.45 1.75
Phenylcinchoninic (see Cinchophen).

Acid, phenylglycollic (see mandelic).
Phosphoric, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs 6.75 - —
t.c.l., same basis 100 lbs 7.00 - 7.50
tanks, works 100 lbs 5.35 —
80%, cbys. c.l., frt. alld. 100 lbs 7.60 - —
t.c.l., works 100 lbs 7.85 9.10
tanks, works 100 lbs 5.75 —
NF, 85%, cbys., c.l., works lb. .0825- —
c.l., works lb. .0850- .0875
tanks works lb .0640 —
Picric, NF, bbls lb. .85 - —
tech., bbls lb. .44 - —
Propionic, syn., pure, dms., c.l., works lb. .22¾- —
l.c.l., works lb. .23¾- —
tanks, works lb. .20¾- —
Pyrogallic, NF (see Pyrogallol)
tech., bbls lb. 3.17 - 3.25
Ricinoleic (see Acid, castor oil, split)
S., bbls, works lb 3.25 - —
Salicylic, crude fib dms. c.l., frt. alld lb. .35 - —
t.c.l., frt. alld. on 100 lbs. or more lb. .36 - —
sublimed, tech. fib dms., c.l., dlvd lb. .37 - —
t.c.l., dlvd lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd. fib dms lb. .55 - —
Sebacic, purif., dms. c.l., works lb. .64 - —
t.c.l., works lb. .66 - .70
Soybean oil, dbl. dist., dms lb. .18¾- .20¾
tanks lb. .16¼- —
s.d., dms lb. .17¼- .19¼
tanks lb. .15¼- —
Stearic, dbl. pressed, bgs lb. .15¼- .17¼
single pressed, bgs lb. .14¾- .16¾
triple pressed, bgs lb. .17½- .19½
Succinic, purif., cryst., bbls., works lb. .62 - .70
Sulfanilic, tech., dms. c.l., frt. alld lb. .21 - —
t.c.l. frt. alld lb. .23 - —
Sulfuric 60° Be. cbys., c.l., works 100 lbs 2.00 - —
t.c.l., works 100 lbs 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works 100 lbs 2.25 - —
c.l., works 100 lbs 2.55 - 3.35
tanks, works ton 22.35 - —
98% tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —
CP, NF, consumers frt. equald. lb. .12¾- —
t.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra cs., c.l., works, frt. alld lb. .16¼- —
t.c.l., same basis lb. .18¼- .18¾
fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks, works ton 39.50 - —
Tall oil, dms., c.l., works lb. .09 - .09½
tanks, works lb. .07½- .08
Tallow dist., dms lb. .15¼- .17¼
tanks lb. .13¼- —
hydrogenated, dms lb. .14¼- .16¼
Tannic, NF fluffy bbls., 1,000-lb. lots lb 2.05 —
smaller lots lb 2.06 2.10
powd., bbls., 1,000-lb. lots lb. 1.95 - —
smaller lots lb. 1.96 - 2.01
tech., dms lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l lb. .49 - —
10,000-lb. lots, 1 shipt lb. .49½- —
smaller lots lb. .50 - —
100-lb. dms lb. .51 - —
imported, bgs lb. .42 - .45
Thioglycolic, refd., cbys., 100% basis lb. 1.35 1.55
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
p-Toluenesulfonic, dms., c.l., t.l., works lb. .17 - —
t.c.l., works lb. .18 - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l lb. .90 - —
125 lbs. to t.l lb. 1.00 - —
o-Toluidine-m-Sulfonic, frt. alld. lb. .70 - —
p-Toluicine-m-sulfonic, bbls., works lb 92 1.04
Trichloroacetic, bots. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
smaller lots, works lb. 3.15 - 3.50
Undecylenic, dms lb. 1.40 - —
Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
t.c.l., works lb. .47½- —
tanks works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .31 - —
t.c.l., t.t.l., frt. equald lb. .32 - —
tanks, frt. equald lb. .28 - —
ACTH, cryst. bulk, 1,000 units/gram, bots gram 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls. lb. 2.25 - —
powdered, 30 mesh, fib., dms lb. 2.75 - —
dl-Alanine dms., works lb 8.50 - 11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms lb. .65 - 1.00
Egg, edible, cryst., powd., bbls. lb. 1.58 - 1.60
flake lb. 1.54 - 1.56
tech., cryst., bbls lb. 1.08 - 1.10
Alcohol, allyl, dms., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. 30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms., t.c.l., dlvd lb. .43 - —
ACS grade, dms., l.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18½- —
l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
l.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
l.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .18½- —
t.c.l., frt. alld E lb. .19½- —
tanks, frt. alld E lb. .16 - —
1-pentanol, (syn. normal), dms., c.l., works lb. .41½- —
t.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
t.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n-Butyl, ferment., dms., c.l., frt. alld lb. .16½- —
t.c.l., frt. alld lb. .17½- —
tanks, frt. alld lb. .14 - —
syn., dms., c.l., dlvd lb. .16½- —
t.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
sec-synthetic, dms., c.l., dlvd. lb. .14½- —
t.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .12 - —

right as rain

UNIFORM QUALITY
STEADY SUPPLY
PROMPT DELIVERY

ETHYL ALCOHOL
ETHYL ACETATE
BUTYL ALCOHOL
BUTYL ACETATE
ACETONE
ACETALDEHYDE
ACETIC ACID
AMYL ACETATE
REFINED FUSEL OIL
ISOAMYL ALCOHOL

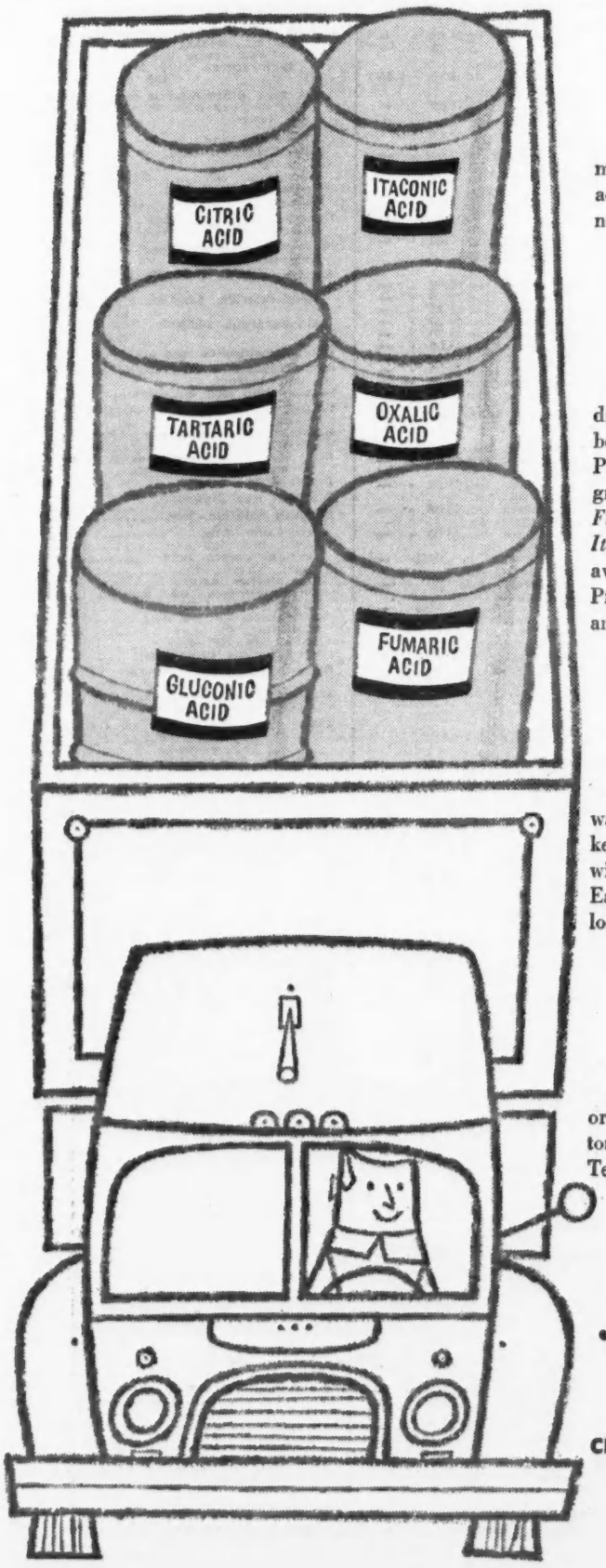
PUBLICKER INDUSTRIES Inc.
1429 WALNUT STREET, PHILADELPHIA 2, PA.
NEW YORK • NEW ENGLAND • MIDWESTERN DISTRIBUTORS, PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022
CHICAGO—RANDOLPH 6-6678 • PITTSBURGH—POPLAR 6-3606

Alcohol, n-butyl, tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld. lb. .15 - —
tanks, frt. alld. lb. .12 - —
Capryl, 85%, dms., c.l. and t.l., works lb. .19 - —
l.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
sec., 92-99%, dms., c.l. lb. .22 - —
l.c.l. lb. .23 - —
tanks lb. .19½- —
Cetyl, extra, fib. cns., 500-lb. lots or more lb. .65 - .73
NF, fib. cns., 140-lb. lots or more lb. .48 - —
Cinnamic, bots lb. 2.15 - 2.75
Decyl mixed isomers, dms., c.l., dlvd. lb. .23½- —
l.c.l., dlvd. lb. .24½- —
tanks, dlvd. lb. .21 - —
perfume grade, bots lb. 1.75 - 2.00
normal (see 1-Decanol).
Denat. CD-12, CD-13 CD-14, CD-17, dms., c.l., dlvd. E of Rockies gal. .64½- .66
l.c.l., same basis gal. .69½- .77
tanks, dlvd. same basis. gal. .48½- .50
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.
Proprietary solvent, dms., c.l., dlvd. E of Rockies gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.
SD1, dms., dlvd. E. of Rockies. gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD2B, dms., c.l., dlvd. E of Rockies gal. .64 - —
l.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .635 - —
l.c.l., same basis gal. .695 - .745
tanks same basis gal. .475 - —
SD23A. dms. c.l. dlvd. E. of Rockies gal. .655 - —
l.c.l., same basis gal. .705 - .763
tanks, same basis gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD29. dms.. c.l.. dlvd. E. of Rockies gal. .645 - —
l.c.l. same basis gal. .695 - .755
tanks, same basis gal. .485 - —
SD30. dms.. c.l.. dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
SD35A dms. c.l. dlvd. E of Rockies gal. .663 - —
l.c.l. same basis gal. .715 - .775
tanks, same basis gal. .503 - —
For anhydrous alcohol, on above formulas, prices are 7c. per gallon higher.
SD40, dms., c.l., dlvd. E. of Rockies.. gal. .645 - —
l.c.l. same basis gal. .695 - .755
tanks. same basis gal. .485 - —
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.
Diacetone acetone-free, dms., c.l., dlvd lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .123 - —
tech., dms., c.l., dlvd lb. .145 - —
t.c.l., dlvd lb. 1.55 - —
tanks, dlvd lb. .12 - —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal.20.58 - —
l.c.l. same basis gal.20.63 -20.69
tanks same basis gal.20.42 - —
tax free, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l. same basis gal. .68 - .74
tanks, same basis gal. .47 - —
absolute, 200 pf. tax paid, dms., dlvd. E of Rockies gal.21.68 - —
l.c.l., same basis gal.21.73 -21.79
tanks, same basis gal.21.52 - —
2-Ethylbutyl, dms. c.l., works lb. .30 - —
l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E. lb. .24¼- —
l.c.l., same basis lb. .25¼- —
tanks, same basis lb. .21¾- —
Furfuryl cns. works lb. .29 - —
dms., c.l., Memphis, Tenn. lb. .20 - —
Newark, N. J lb. .21½- —
l.c.l., Memphis, Tenn. lb. .21 - —
Newark, N. J lb. .22½- —
tanks Memphis Tenn lb. .184 - —
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd. lb. .29¼- —
t.c.l., dlvd lb. .29¾- .30¼
tanks, dlvd lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.
Isoamyl, dms. c.l. works, frt. alld. E lb. .28 - —
t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isobutyl, dms., c.l., dlvd. lb. .15½- —
t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .13 - —
Iso-octyl, dms., c.l., dlvd. E. lb. .23½- —
l.c.l., dlvd E lb. .24½- —
tanks, dlvd E lb. .21 - —
Isopropyl, refd. 91%, dms., c.l., dlvd gal. .53 - —
t.c.l., dlvd gal. .60 - —
tanks, dlvd gal. .37 - —
95%, c.l., dlvd gal. .55 - —
t.c.l., dlvd gal. .62 - —
tanks, dlvd gal. .39 - —
99%, dms., c.l., dlvd gal. .57 - —
t.c.l., dlvd. gal. .64 - —
tanks, dlvd gal. .41 - —
Lauryl, bots. lb. 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Methyl isobutyl carbinol).
Octyl, perfumer's grade, bots lb. 1.60 - 3.25
tech (see Octanol, normal).
2-Phenylethyl, extra, dms lb. 1.14 - 1.45
standard, dms lb. 1.10 - 1.60
n-Propyl, dms., c.l., dlvd. lb. .13¼- —
l.c.l. dlvd lb. .14¼- —
tanks, dlvd lb. .11 - —
Tetrahydrofurfuryl, dms., c.l. or t.l., f.o.b. Memphis, Tenn lb. .37 - —
l.c.l or t.t.l. f.o.b. Memphis, Tenn lb. .38 - —
f.o.b. Newark, N. J lb. .40 - —
tanks, dlvd E of Denver lb. .363 - —
dlvd W of Denver lb. .375 - —
Tridecyl mixed isomers, dms., dlvd lb. .26½- —
t.c.l., dlvd lb. .27½- —
tanks, dlvd lb. .24 - —
Wood (see Methanol)
Aidol, 95% dms., works lb. .23 - —
denaturing grade dms gal. 2.15 - —
Aldrin tech. fib dms. c.l., t.l., dlvd lb. .80 - —
t.c.l. dlvd lb. .85 - —
Aletris root bgs lb 1.75 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-dihydroxy anthraquinone).

Allethrin, 90%, dms., frt. alld. lb. 28.80 - 33.90
soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms., frt. alld lb. .95 - 1.00
Allspice (see Pimento).
Allyl bromide, cbys., works lb. 1.45 - 1.50
Chloride, dms., c.l., dlvd. lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .15 - —
Aloe, Cape, cs lb. .50 - —
powd., cs lb. .65 - —
Curacao, kgs lb. .60 - —
Aloin, USP, bbls., dms., kgs lb. 3.35 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
USP, burnt, dms. lb. .20 - .21
hydrous, dms. lb. .07¾- .08
Potassium, gran., bgs., works, 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt dms lb. .20 - .21
hydrous, dms lb. .07¾- .08
Potash-chrome, dms lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0455- —
t.c.l., works lb. .048 - .0755
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Chloride, com'l, anhyd., dms., c.l., works, frt. equald lb. .16 - —
l.c.l., works, frt. equald. lb. .16½- —

Aluminum chloride, cryst., dms., c.l., works 100 lbs.16.00 - —
l.c.l., works 100 lbs.17.50 - —
soln. 32°, cbys, c.l., works lb. .0445- —
l.c.l., works lb. .0520- .1290
tanks, works 100 lbs. 3.45 - —
NF, gran., dms., works lb. .29 - .30
Fluoride, tech., anhyd., bgs., c.l., works lb. .16¾- —
t.c.l., works lb. .17¾- .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., dms., c.l., works lb. .12 - —
t.c.l., works lb. .12½- —
Hydrate, heavy, bgs., c.l., frt. frt. equald lb. .032 - —
20,000-40,000 lb. lots, same basis lb. .0345- —
2,000-20,000 lb. lots, same basis lb. .0445- —
bulk, same basis lb. .0295- —
Hydroxide, gel, pharmaceutical, 14-15%, Al_2O_3, fib. dms., works lb. .22 - —
contract, works lb. .21 - —
Gel, 9-9½%, Al_2O_3, fib. dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP XIV, fib. dms., works lb .82½- —
contract, works lb. .79½- —
tech., powder (see Aluminum hydrate).

Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld. lb. .2710- —
pigs 10,000-lb lots, frt. alld. lb. .2500- —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms fb. .68 - —
standard grade dms lb. 48 - —
Powder, lining extra, fine, dms. lb. 1.09 - —
standard grade, dms lb. 78½- —
Aluminum powder and paste prices are f.o.b. shipping point. Add 1c per lb for 100-lb dm., 1½c. per lb for 50-lb dm., 3c. per lb. for 10-lb. can and 5c. to 12c per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over.
Resinate, precip., 2.1% Al. dms., lb. .33 - —
Stearate, dibasic, ctns., c.l. lb .39 - —
t.c.l. lb. .40 - .44
monobasic, ctns., c.l. lb. .39 - —
t.c.l. lb. .40 - .44
tribasic, ctns., c.l. lb. .39 - —
t.c.l. lb. .40 - .44
Sulfate coml., bulk, c.l., works 100 lbs 1.85 - —
grd., bgs., c.l., works ton 37.00 - —
lump bgs., c.l., works ton 40.00 - —



versatile

Do you need a sequestering agent? A reactive intermediate? A non-corrosive cleaning agent? A non-toxic acidifier? You may well be able to fill these or other needs best with one of the versatile Pfizer Organic Acids.

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You can order *Pfizer Citric Acid* in economical anhydrous form, which saves paying freight for water, gives better quality control. Mild *Gluconic Acid* is shipped by Pfizer as a 50 per cent aqueous solution. *Oxalic Acid* in granular and fine granular forms. *Tartaric Acid* and *Fumaric Acid* in fine granular and powdered forms. *Itaconic Acid*, a versatile polymer intermediate, now available in an economical technical grade. Check Pfizer, too, for low cost salts of citric, gluconic, oxalic and tartaric acids.

fast delivery

Pfizer has recently increased the number of modern warehouses it maintains across the country in order to keep adequate stocks of its high quality chemicals within short haul of plants everywhere—North, South, East and West. Newest of these new warehouses are located in Dallas, Texas, and Portland, Oregon.

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CHAS. PFIZER & CO., INC. *Chemical Sales Division*
630 Flushing Ave., Brooklyn 6, N. Y.
Branch Offices: Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Tex.

Aluminum sulfate, iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.55 • —
l.c.l. works, frt equald. 100 lbs. 3.95 4.58
Aluminum sulfate prices $1 per ton higher in the South.
USP, gran., dms., works lb .29 .30
powd., dms., works lb. .36 • .37
Trihydrate, heavy (see Aluminum hydrate heavy)
Ambergris, gray, bots oz. 8.00 -10.00
p-Aminoacetaniilide, frt. alld. lb. 1.57 —
Aminoazotoluene base, bbls., 100% basis lb 1.03 1.18
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 —
l.c.l., dlvd lb .485 • —
tanks, dlvd lb 45 —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. 44 • —
l.c.l. frt alld lb 45 • —
tanks, frt alld lb 42 • —
m-Aminophenol, dist., dms., ton lots, lb 2.05 • —
smaller lots lb 2.50 • —
p-Aminophenol, dms., frt. alld lb 1.15 • —
Aminophylline, USP 100-lb dms lb 3.55 • —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.80.00 • —
refrigeration, tanks works frt equald ton.82.50 —
aqueous, tanks, works, anhyd basis ton.83.00 —
Ammoniacal liquor (see Ammonia aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 • —
l.c.l., same basis 100 lbs. 9.25 • —
white (see Ammonium chloride tech.).
Ammonium acetate, purif., dms lb. .41 • —
Benzoate USP dms., kgs. 4,000-lb. lots frt. alld lb 80 • —
smaller lots, frt. alld lb 81 1.08
Biborate, gran. dms. c.l. works ton.319.50 —
ton lots, ex whse ton.397.00 • —
smaller lots, ex whse ton.402.00 • —
Bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 • —
l.c.l., works 100 lbs. 9.00 • —
Bichromate, dms. works lb 42 .43
Bifluoride, dms., dlvd lb. .2145- .2245
Bromide, NF, gran. bbls. lb. .43 —
Powdered ammonium bromide 10c per lb higher
Carbonate, USP, lump, dms. lb. .16 • —
Chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 —
l.c.l., works 100 lbs. 7.75 8.20
USP, gran. bbls., dms lb. .17¼ • —
Citrate, dibasic, bbls lb. .77 • —
Dichromate (see Ammonium bichromate)
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia aqueous)
Hypophosphite, NF, dms. lb. 3.07 • —
Iodide, NF dms., bots lb 4.26 4.38
Linoleate, 80% dms. works lb. .50 .55
Nitrate, dom., fert. grade, 33.5% N., bgs., western works, frt. equald base price ton.64.00 • —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton, base price ton.64.00 • —
August discount ton 5.00 • —
western, bgs., c.l., f.o.b. cars, Los Angeles ton.79.69 • —
with dolomite, 20.5% N, bgs., Hopewell, Va ton.51.00 —
Oxalate, fine gran., dms lb. .26½- .31
Pentaborate, gran., bgs., c.l., works. ton.187.50 • —
ton lots, ex whse ton.273.50 • —
smaller lots, ex whse ton.278.50 • —
Ammonium pentaborate powder $10 per ton higher
Persulfate, kgs lb. .38 47½
Phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis lb. .10 —
dibasic, NF, V bbls, dms lb. .46 • —
tech. bgs c.l. works, frt. equald lb. .09¼- —
l.c.l., same basis lb. .10 —
Salicylate, NF, dms., kgs. lb. 1.62 1.64
Silicofluoride, dms., works lb 11¾ 13¼
Sulfamate, bgs., c.l., t.l., works lb. 18 —
l.c.l. works lb. 22 —
Sulfate, coke-oven, bulk, producing ovens, base price ton.32.00 —
syn., bulk, c.l. f.o.b. works ton 32.00 -42.00
purif., dms., works lb. .10 • .10½
Sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 • —
Sulfocyanide, tech (see Ammonium thiocyanate)
Thiocyanate tech. dms., c.l., works lb. .29 —
l.c.l. works lb. 22 .26
Thioglycollate, coml., cbys., 100% basis lb 1.35 1.65
highly purif., cbys., 100% basis. lb. 1.70 1.96
Thiosulfate, cryst., photo grade, 6b dms. frt alld lb 65 —
d-Amphetamine hydrochloride dibasic bots lb.28.00 —
dl, dms lb 6.00 —
d-monobasic, bots lb.28.00 —
d-Phosphate, dibasic, bots lb.28.00 —
dl dms lb 6.00 —
d-Sulfate, dms lb.28.00 —
dl, dms lb 6.00 —
Amyl acetate ex fusel oil tech., dist. from 125° to 150°C, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 • —
syn., oxo process, dms., c.l., dlvd lb. .19¾- —
l.c.l., dlvd lb. .20¾- —
tanks, dlvd lb. .18 • —
ex pentane, reg. dms., c.l., dlvd. lb. .18½- —
l.c.l., dlvd lb. .19½- —
tanks, dlvd lb. .16 • —
tech., dms., c.l., dlvd lb. .16½- —
l.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 • —
Alcohol (see Alcohol, amyl).
n-Butyrate, dms lb. 1.00 1.25
Cinnamic, aldehyde, dms lb. 1.70 2.20
Nitrite, USP, bots lb. 1.75 1.83
Salicylate, cns., dms lb. .82 1.10
o-tert-Amyl phenol, dms., c.l., works, lb. 49½ —
l.c.l. works lb. .50½- —
tanks, works lb. .47 —
p-tert-Amyl phenol, dms., c.l., works. lb. .26¾- —
l.c.l., works lb. .27¾ —
tanks, works lb 25¾ —
Anethole, cns., dms lb. 1.60 • 1.80
tech. dms lb 1.10 1.15
Angelica root, dom., bls lb. .80 .90
Aniline oil, dms., c.l., frt. alld lb. .22 • —
l.c.l., frt. alld lb. .23 • —
tanks, frt. alld lb. .21 • —
tankwagons, min. 2,000 gals. lb. .21½- —
Salt, dms. c.l. truckloads, 20,000 lbs., min. frt. alld lb. .33 • —
l.c.l., same basis lb. .35 • —
Anise seed, Mexican, bgs. lb. .25 • —
Spanish, bgs lb. .25 • —
Syrian, bgs lb. .25 • —
Anisic aldehyde, bots., dms lb 1.95 2.70
o-Anisidine, dms., c.l., frt. alld lb .80 —
l.c.l. same basis lb. .82 —
tanks, same basis lb. 78 —
p-Anisidine, dms. works lb. .97 —
Annatto seed, whole, bgs lb. 15 .17
Anthracene 90-95% bbls., ton-lots, works lb. .83 —
smaller lots, works lb 95 —
Anthraquinone 99.5% bbls. c.l., frt. alld lb. .83 • —
l.c.l., same basis lb. 86 —
electrical grade, bbls., l.c.l., same basis lb. .91 • —
Antimony butter (see Antimony trichloride)
Metal, bulk, c.l., mines lb. .33 —
cs., c.l. mines lb 33½- —
Oxide, bgs., c.l., frt. alld lb. .27 • —
l.c.l. frt. alld lb .28½ —
Sulfide, approx 65% bgs., dlvd lb. 23 26
Trichloride, anhyd., solid, pails, c.l., works lb. .41 —
l.c.l., works lb. .43 • —
Antimony-potassium tartrate, tech., powd., dms lb. .69½- .74½
USP, powd., dms lb. .74½- .75½
Antipyrine, NF, 200-lb. bbls lb 3.50 —
Apomorphine hydrochloride, USP 25 oz. lots oz.35.60 • —
Areca nuts, powd., bbls lb. .13 • —
Arecoline hydrobromide NF, bots., tins oz 4.50 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo.74.80 —
Arnica flowers (true Montana), bls. lb. 2.25 • —
Arsenic, crude (95%), bulk, c.l., works lb. .016 • —
bbls., c.l., works lb. .031 • —
Trioxide USP dms lb 48 —
White, powd., bbls., c.l., works. lb. .04½- —
l.c.l., works lb. .06½- .07½
Asafetida, cn lb .40 —
powd., bbls., dms lb. .85 —
Asbestine (see Talc, fibrous, N. Y.).
Asbestos, Canadian, crude,
6D, c.l. (30 tons), mines ton.82.00 • —
7D, c.l. (30 tons), mines ton.72.00 • —
7F, c.l. (30 tons), mines ton.68.25 • —
7H, c.l. (30 tons) mines ton.58.00 • —
7K, c.l. (30 tons), mines ton.48.30 • —
7M, c.l., (30 tons), mines ton.42.00 • —
7R, c.l. (30 tons), mines ton.41.00 • —
7RF c.l. (30 tons), mines ton.42.00 • —
7T, c.l., (30 tons), mines ton.39.00 • —
7TF c.l. (30 tons), mines ton.42.00 • —
Asbestos c.l. prices are in U. S. funds, l.c.l. lots $4 per ton higher
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 • —
select 350° F. fusing pt., bgs., c.l., mines ton.41.00 • —
270°-295°F. fusing pt., bgs. c.l., mines ton.40.00 • —
seconds 300°-390°F fusing pt. bgs., c.l., mines ton.35.00 • —
Manjak, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 —
emulsion, tanks, tankwagon refy gal. 09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 —
85-300 penetration, tanks, tank wagon refy ton 20.00 —
Aspirin (see Acid acetylsalicylic)
Atropine, USP, bots oz. 3.90 • 4.50
Sulfate, USP, bots lb. 2.10 • 2.55

B

Bacitracin, bulk, 1,000,000,000 or more units, 50,000 units. .70 —
less than 1,000,000,000 units, 50,000 units .75 —
Balm of Gilead buds, dried, bgs lb 1.35 1.45
Barberry root bark, bgs lb 28 .31
Barbital, NF, 100-lb. dms lb. 4.50 • —
Sodium, NF, dms lb. 4.75 • —
Barium carbonate, precip., bgs., c.l., works ton.104.00 • —
smaller lots, works ton.114.00 • —
Chlorate, kgs., works lb 32 .36
l.c.l., t.l.l. frt. equald ton.285.00 —
Chloride anhyd. bgs. c.l., works ton.165.00 • —
t.c.l., works ton.175.00 • —
NF, cryst., 100 lb. dm lb. .22 • —
tech. cryst. bgs., c.l., works. 100 lbs 6.50 • —
t.c.l. works 100 lbs 7.00 • —
Chromate, bgs., frt. equald lb. .35 • —
Dioxide (see Barium peroxide)
Hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 • —
t.c.l., t.t.l., frt equald ton.218.00 • —
Monoxide (see Oxide).
Nitrate, bbls., c.l., t.l. dlvd lb. .16 • —
l.c.l. t.t.l. dlvd lb. .17 • —
Oxide, grd. dms., c.l., t.l., frt. equald ton.275.00 • —
Peroxide, dms. frt equald lb. .20 • —
Stearate, ctns., c.l., frt. alld lb. .41 • —
l.cl. same basis lb. .42 • .46
Sulfate, tech. (see Barytes and blanc fixe), X-ray, dms lb. .15 • .15½
Sulfide, dms., c.l., works ton.85.00 • —
l.c.l. works ton.95.00 • —
Barytes, Southern, off-color, bgs., mines ton.25.00 • —
95-75%, bgs., mines ton.25.00 • —
water-grd., paper bgs., c.l., St Louis ton.49.00 • —
ex-whse, N. Y. ton.70.85 • —
Bauxite, bulk, mines ton 6.75 -10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls lb. .35 .37
root, bls lb. .45 .50
Bentonite, dom., 200 mesh, bgs., c.l., mines ton.14.00 • —
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.84.00 • —
1 ton lots, ex whse ton.87.00 • —
low gel., bgs., 5-ton lots, ex whse ton.82.35 • —
1 ton lots ex whse ton.85.35 • —
Benzal chloride, cbys., works lb. .44 —
Benzaldehyde, NF, dms lb 74 1.05
tech., cbys., dms., t.l. lb. .43 • —
smaller lots lb. .44 • —
Benzene (see Benzol),
Hexachloride, 25% and 99% gamma isomer (see Lindane), tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .0075- .008
l.c.l., works, gamma unit-lb. .009 .0095
Benzene hexachloride, tech., low gamma, dms., c.l., dlvd., gamma unit-lb. .0075- —
l.c.l., works, gamma unit-lb. .009 • —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 • —
l.c.l., same basis lb. 1.21 • —
Sulfate, tech., frt. alld., 100% basis lb. 1.21 • —
Benzocaine, dms. lb. 3.48 • 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa. gal. .36 • —
Birmingham district gal. .36 • —
Chicago district gal. .36 • —
Cleveland district gal. .36 • —
Geneva, Utah gal. .36 • —
Johnstown, Pa. gal. .36 • —
Lackawanna, N. Y. gal. .36 • —
Lone Star, Texas gal. .36 • —
Lorain, Ohio gal. .36 • —
Middletown, Ohio gal. .36 • —
Minnequa, Colo gal. .36 • —
Philadelphia district gal. .36 • —
Pittsburgh district gal. .36 • —
Sparrows Point, Md. gal. .36 • —
Syracuse, N. Y. gal. .36 • —
Terre Haute, Ind. gal. .36 • —
Youngstown, Ohio gal. .36 • —
Petroleum, 2°, Houston gal. .36 • —
Benzophenone, dms. lb. 1.40 • 1.70
Benzotriazole tech. dms., 1,000-lb. lots, works lb. 2.25 • —
Benzotrichloride, cbys, 1,000-lb lots or more, frt. equald lb. .18 • —
smaller lots, frt. equald lb. .20 • —
Benzoyl chloride, cbys. dms., c.l., works, frt. equald. lb. .22 • —
l.c.l., same basis lb. .23 • —
tank trucks, dlvd Metropolitan area lb. .21 • —
Peroxide, purit. fib. dms., 50 to 1,000-lb. lots, works lb. .98 • 1.00
Benzyl acetate, f.f.c., cns., dms lb. .60 • 1.00
Alcohol (see Alcohol, benzyl)
Benzoate, NF, f.f.c., 500 lb. dms. lb .62 • —
Chloride, tech., 13-gal. cbys., dms., c.l., works, frt. equald. lb. .23 • —
l.c.l. same basis lb. .24 • —
tank trucks, dlvd, Metropolitan area lb. .21 • —
A 2½c differential is quoted on benzyl chloride in 5-gal. cbys. (in steel) dms. prices were ½c lower
Cinnamate, cns lb. 3.60 • 3.90
Dimethylamine, dms., works lb. 2.25 • —
Formate, cns lb. 1.80 • 2.10
Isoeugenol, cns lb. 9.85 • —
Propionate, bots lb 1.35 1.65
Salicylate, bots lb. 1.60 • 1.85
Benzylidine acetone, bots lb. 1.75 • 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns lb.35.00 -36.25
Hydrocnloride, bots lb.35.00 -36.25
Betaine, anhyd., 10,000-lb. lots, frt. alld lb. 3.00 • —
Hydrochloride, 5,000-lb. lots, frt. alld lb. 1.60 • —
Monohydrate, 10,000-lb. lots, frt. alld lb. 2.60 • —
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine)
Betaphenylethy.amine (see b-Phenylethylamine).
BHC (see Benzene hexachloride technical)
Biotin cryst., bots gram.10.00 • —
Biphenyl (see DiphenyD.
Bismuth chloride, jars lb. 5.11 • —
Hydroxide, dms lb 4.65 • —
Metal, bxs. ton lots lb. 2.25 • —
Nitrate, cryst., dms. lb. 2.10 • 2.17
Oxide, anhyd., dms lb 4.47 5.05
Oxychloride, dms lb 4.37 • 4.42
Phenolsulfonate, fib dms lb 5.22 • —
Subcarbonate, USP, dms. lb. 3.20 • —
Subgallate, NF, fib. dms. lb. 3.15 • —
Subiodide, fib. dms lb 5.37 • —
Subnitrate, NF, dms lb 2.65 • —
Subsalicylate, USP dms lb. 3.50 • —
Bismuth-ammonium citrate, USP, powd jars lb. 4.22 • —
Bisphenol-A, c.l., t.l., frt. alld lb. .29¾- —
l.c.l., same basis lb. 30¾- —
Black, acetylene, imp., bgs., c.l., duty and freight extra lb. .19 • —
cs., l.c.l., ex whse lb. .24½- .30
Ash (see Barium sulfide).
Bone, dms. l.c.l., frt. alld lb. .17 .23¼
Pacific coast bone black prices 2c. per lb. higher
Carbon, channel, pigment, high color, beads, ctns., c.l., works. lb. .72 • —
t.c.l. dlvd. or whse. lb. .78 • —
medium color, uncompressed, bgs., c.l., works. lb. .12 • —
t.c.l. dlvd. or whse. lb. .19 • —
rubber, beads, bulk, c.l., works lb. .07 • —
bgs., c.l., works lb. .074 • —
l.c.l., works lb. .1225- —
furnace, fast extruding, bgs., c.l., works lb. .06 • —
ctns., t.c.l., whse lb. .10 • —
high abrasion, bulk, c.l., works. lb. .0750- —
bgs., c.l., works lb. .0790- —
t.c.l., dlvd. or whse lb. .122 • .125
high modulus, bgs., c.l., works. lb. .0550- —
ctns. t.c.l. whse lb. .0950- —
semi-reinforcing bgs., c.l., works lb. .045 • —
bgs. ctns. t.c.l., whse lb. .085 • —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works. lb. .13¼- —
t.c.l., works lb. .13½- —
Lamp, bgs., c.l., works lb. .16 • .45
Mineral, bgs., works lb. .0160- .0075
Blackberry root bark, bls lb. .45 • —
Black haw root bark, bls lb. .63 • .65
tree bark, bls lb. .45 • .50
Blanc fixe, direct process, bgs., c.l., works ton.110.00 • —
t.c.l., works ton.120.00 • —
N. Y. whse ton.155.00 • —
Blood, dried, 16-16½% ammonia, unit-ton. 5.25 • —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. 6.00 • —
soluble, bgs., c.l. lb. .13 • .14
t.l. lb. .15 • .17
l.t.l. lb. .15¼- .35½
Bloodroot, bls lb .48 • .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N of Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.25 • —
toner, litho flushed, 125-lb. bbls., same basis lb. 1.28 • —
Cobalt, genuine, bbls., same basis. lb. 4.90 • —
Imitation (see Blue, ultramarine).
Dyes (see Dyes).
Blue, iron, reg., bbls., c.l., same basis lb. .52 • —
l.c.l., ton lots, same basis lb. .53 • —
smaller lots, same basis lb. .54 • —
alkali-resisting, bbls., c.l., same basis lb. .57 • —
l.c.l., ton lots, same basis. lb. .58 • —
smaller lots, same basis. lb. .59 • —
Methyl, violet toner, molybdated, PMA, bbls., same basis lb. 2.80 • —
tungstated, PTMA, bbls., same basis lb. 4.35 • —
Peacock, fugitive, 100% color strength, bbls., same basis lb. .90 • —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 • —
resinated, bbls., same basis lb 3.00 • —
water dispersable, bbls, same basis lb. 1.69 • —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb.39½- .35
jobbing types, bbls, same basis. lb. .19 —
regular types, dry bbls, same basis lb 22½- .33
Victoria toner, molybdated, PMA, bbls lb. 4.50 • —
tungstated, PTMA, bbls lb. 5.55 • —
Blue dry colors, dlvd prices ½c higher Ala., Fla., Ga., La (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex (El Paso 7c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1 6c. higher Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt equalized with Chicago
Vitrol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E ton.60.00 • —
Los Angeles ton.82.50 • —
Bone phosphate, defluorinated (see D) of lime (see Calcium phosphate, tribasic).
precipitated (see Calcium phosphate tribasic, NF precip.)
Borax, tech., anhyd., 99%, bgs., c.l., works ton.83.00 • —
ton lots ex whse, N. Y. or Chi ton.137.25 • —
smaller lots, same basis. ton.142.25 • —
bulk, c.l., works ton.74.00 • —
cryst., 99½%, bgs., c.l., works. ton.71.00 • —
ton lots, ex whse, N. Y. or Chi ton.125.25 • —
smaller lots, same basis. ton.130.25 • —
gran., decahydrate, 99½%, bgs., c.l., works ton.45.00 • —
ton lots, ex whse, N. Y. or Chi ton.99.25 • —
smaller lots, same basis. ton.104.25 • —
bulk, c.l., works ton.38.50 • —
Pentahydrate, 99%, bgs., c.l., works ton.60.00 • —
ton lots, ex whse, N. Y. or Chi ton.114.25 • —
smaller lots, same basis. ton.119.25 • —
bulk, c.l., works ton.53.50 • —
powd., bgs., c.l., works ton.50.00 • —
ton lots, ex whse, N. Y. or Chi ton.104.25 • —
smaller lots, same basis. ton.109.25 • —
USP borax $15 per ton higher
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt. lb. .18 • .24
l.c.l. same basis lb. .19 • .26
Borneol, cns lb. 2.50 • 4.50
Boron trifluoride gas, cyls., truckload, works lb. .62 • —
t.t.l., works lb. .70 • —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .33 • —
l.c.l., same basis lb. .34 • .39
ret. dms., c.l., t.l, dlvd E of Rockies lb. .31 • —
l.c.l., same basis lb. .31 • .33
tanks, same basis lb. .22½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 • —
l.c.l., same basis lb. .50 • —
Bromoform, pharmaceutical grade, bots lb. 1.62 • 2.60
cbys. lb. 1.53 • —
Bromstyrol, bots lb. 5.40 • 5.70
Bronze powder, aluminum (see A).
Brown, iron oxide pure, bgs., c.l., works lb. .14¼- —
l.c.l., works lb. .14½- —
Oxide, metallic, bgs., works lb. .04 • —
Sienna, burnt, paper bgs., c.l., works lb. .06¼- .17¼
l.c.l., works lb. .06½ .17½
raw, paper bgs., c.l., works lb. .06¼- .16¼
l.c.l., works lb. .06½- .16½
Umber, burnt, American, c.l., works lb. .07 • .07¾
l.c.l., works lb. .07¼- .08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .07¾- —
raw, American, bgs., works lb. .07½- .08¼
Turkey-type, bgs. works lb. .06¾- .07
Vandyke, bbls., works lb. .09½- .12
Brucine, cns., 100-oz. lots oz. .20 • .25
Sulfate, NF cns., 100-oz. lots oz. .15 • .20
Buchu leaves, bls lb. 1.30 • —
Butadiene, refd., cyls., c.l. refy lb. .21 • —
l.c.l. refy. lb. .22 • —
tanks, refy lb. .15 • —
Butane, indust., tanks, group 3 gal. .05 • —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .16½- —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14 • —
syn., dms., c.l., dlvd. E lb. .16½- —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14 • —
sec-Butyl acetate, syn. dms., c.l., dlvd. E lb. .13½- —
l.c.l., same basis lb. .14¼- —
tanks, same basis lb. .11¾- —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde).
Chloride, dms., c.l., works lb. .37½- —
l.c.l., works lb. .38¼- —
Ether, dms., c.l. works lb. .33 • —
l.c.l., works lb. .33¾- —
tanks, works lb. .31 • —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½- —
l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —
Laurate, dms., works lb. .37½- —
Methacrylate, dms. c.l., t.l., works. lb. .55 • —
l.c.l., works lb. .55½- —
Oleate, refd., dms., l.c.l., works lb. .32 • —
Phenylacetate, dms. lb. 4.50 • 4.60
Phthalate (se Dibutyl phthalate).
Stearate, dms., frt. alld. E. of Mississippi lb. .26 • —
l.c.l., same basis lb. .26½- —
Butylamine (see mono-, di-, and tri-). lb. .23 • —

WHAT IS *experience* WORTH?

Talk to anyone who knows URANIUM. He will know that . . .

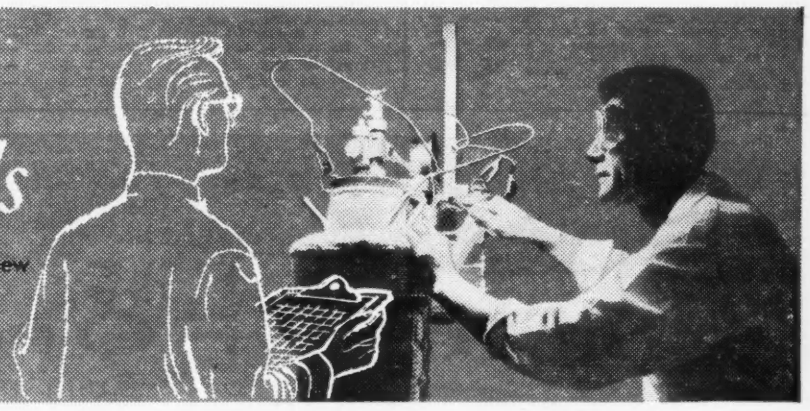
Mallinckrodt was the first chemical firm to produce pure uranium oxide on a commercial scale for the Manhattan Project, starting back in 1942 . . . and that Mallinckrodt is one of the major producers of refined uranium for the Atomic Energy Commission today.

But he may not know that . . .

Mallinckrodt is first again in the nuclear field with...

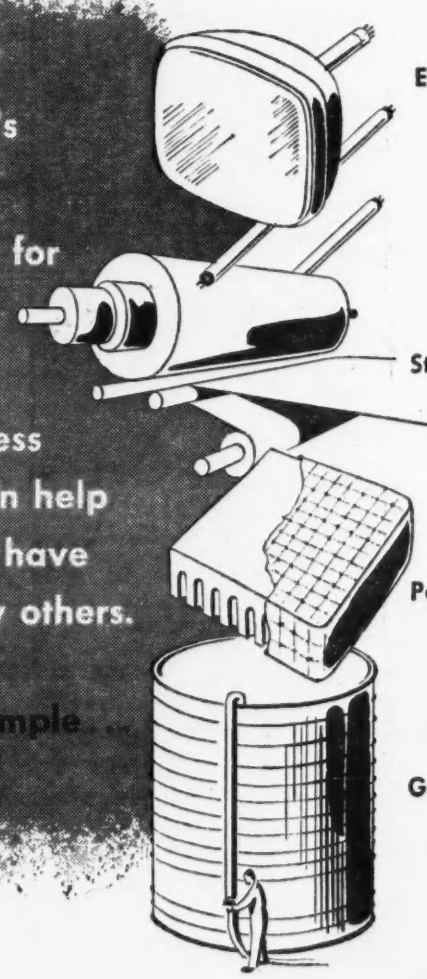
atomic fuel materials

Keeping pace with the atomic era, Mallinckrodt opened its new Special Metals Division plant at Hematite, Missouri, in September, 1956 . . . with facilities to produce uranium compounds for reactor use.



Mallinckrodt's experience and facilities for producing carloads of pure process chemicals can help you, as they have helped many others.

For example...



Electronic chemicals require an unusually low level of impurities and a high degree of uniformity with special physical properties. For television tube phosphors, for instance, Mallinckrodt *silicic acid* is manufactured in three different physical forms to meet the industry's specific demands. For the manufacture of transistors and other semi-conductor devices, Mallinckrodt supplies TransistAR* chemicals with low heavy metal content.

Stearates. Mallinckrodt stearates are used extensively in industry. *Calcium stearate* improves the plasticity of starch-clay coated papers. *Aluminum stearate* is used in the manufacture of lubricating greases, *magnesium stearate* as a tableting lubricant, *sodium stearate* in cologne and deodorant sticks, and *zinc stearate* as an internal lubricant in plastics.

Potassium sulfate supplied by Mallinckrodt plays an important part as an electrolyte to control the degree of polymerization in the manufacture of synthetic latex rubber. It is also used in the manufacture of dry cell batteries and to regulate setting time of gypsum slurries in the production of wall-board.

Gallotannins. Because of the high purity of Mallinckrodt *tannic acid*, it is used extensively to clarify and stabilize wine and other beverages. Gallotannins are also used in the manufacture of inks and dyes, and as photographic developers.

*Trademark

SPECIFY Mallinckrodt **INDUSTRIAL CHEMICALS**

when you want purity, uniformity, and specific physical form to cut processing costs or to upgrade product quality.

Mallinckrodt Chemical Works

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CHICAGO • CINCINNATI • CLEVELAND • DETROIT • LOS ANGELES • PHILADELPHIA • SAN FRANCISCO
IN CANADA: **MALLINCKRODT CHEMICAL WORKS LIMITED** • MONTREAL • TORONTO

6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
i.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs. c.l., works. lb. .27½- —
i.c.l. lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
i.c.l., dlvd lb. .23 - —
tanks, dlvd lb. .19½ —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide 25-lb. fib dms lb 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, dms. 100-lib lots or more lb 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, 100-lb lots or more lb 2.80 - —
Citrated, USP, dms., 100-lb. lots or more lb 2.70 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots, works, gram .65 - —
in edible oil (see Viosterol).

Calcium p-aminosalicylate, fib. dms., 100 lbs. or more, frt. adjusted. lb. 4.00 - —
Arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09½
Bromide, NF, 100 lbs. or more lb. .92 - —
Carbide, standard generator size, dms., c.l., dlvd ton.134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
i.c.l., same basis lb. .10 - .10½
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 —
10 to 20 microns, bgs. c.l., works ton.17.00 -18.00
precip., dense, bgs. c.l. works ton 32.50 - —
i.c.l., works ton.42.50 - —
medium, bgs., c.l., works ton.38.00 - —
i.c.l., works ton 48.00 - —
surface treated bgs., c.l., works ton.37.50 - —
i.c.l., works ton.47.50 - —
ultrafine, bgs., c.l., works ton.110.00 -160.00
i.c.l., works ton.120.00 -175.00
Chloride, cryst. purif., dms lb. .27 - —
flake, 77-80%, paper bgs., c.l., works, frt equald ton.29.00 —
liquor, 40%, tanks, frt. equald ton.12.35- —
pellets bgs., c.l., works ton.35.40 - —
powd., bgs., c.l., works ton.35.00 - —

Calcium chloride, solid, 73-75%, dms., c.l., frt. equald. ton.27.50 - —
i.c.l. works frt. equald. ton.34.00 -71.00
USP, gran, dms. lb. .22 —
Chromate, bgs., frt. equald. lb. .29½- .30
Cyanide, dms., c.l., dlvd, E. of Rockies lb. .20 - —
i.c.l., same basis lb. .24 - .55
Cyclamate, 100-lb. fib. dms. lb. 2.95 - —
Gluconate, AA, bbls., dms. lb. .74 - .76
USP, bbls., dms lb. .67 - .69
Hydride, dms., works lb. 2.15 - 3.00
Hypochlorite, high test, 45-lb. cs., dlvd, E. of Rockies cs.22.95 -25.10
100-lb. dms., same basis dm.30.80 -34.50
Hypophosphite, dms., 1,000-lb. lots. lb. 1.28 - —
Iodide, jars lb. 4.52 - —
Lactate NF, dms., 10,000-lb. lots or more works lb. .38 - .40
Mandelate, USP, dms., works ib. 2.10 - 2.25
smaller lots, works lb. .41 - .48
Naphthenate liq., 4% Ca., dms., frt equald lb. .27¼- —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton.46.00 - —
tech., 5-dm. lots, works lb. .13 - —
Pantothenate, dms., bots., frt. adjusted gram. .045 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate)
Phenolsulfonate, dms lb .70 - —
Phosphate, dibasic, USP, bgs., c.l., frt. equald. 100 lbs. 7.75 - —
i.c.l., frt. equald 100 lbs. 8.50 —
feed grade, 18½%P, bgs., c.l., t.l., frt. equald ton.79.55 -83.25
i.c.l., frt. equald... ton.89.55 -93.25

Calcium phosphate, dibasic, feed grade, 21% P, bgs., c.l., t.l., frt. equald..ton.94.50 - —
i.c.l., frt. equald ton.99.50 -104.50
monobasic, bgs., 10,000-lb. lots, frt. equald..100 lbs. 7.20 - —
smaller lots, same basis, 100 lbs. 7.70 - —
tribasic, NF precip., bgs., c.l., works, frt. equald..100 lbs. 9.25 - —
i.c.l., frt. equald..100 lbs.10.50 - —
Phylate, bgs., works lb. .50 - —
Resinate precip. dms. frt. alld., works lb. .30½- —
Silicate, hydrated, bgs. c.l., works. lb. .06 - —
i.c.l., works lb. 06½- —
paint grade (see Wollastonite)
Stearate, ctns., c.l. lb. .39 - —
i.c.l. lb. .40 - .44
Sulfate (see Gypsum)
Calomel, USP, powd., dms lb. 5.42 - —
Camphene 46 m p dms. incl., c.l., works lb. .15 —
i.c.l. same basis lb. .16½- —
tanks, same basis lb. 12½- —
Chlorinated, 67-69% (see Toxaphene)
Camphor monobromated NF dms kgs lb. 3.50 - —
nat USP powd cs 100-lb lots lb. .60 .65
tablets, 1-oz., ½-oz cs lb .85 .90
syn., tech., 1 bbls or more lb. .48 - —
USP gran powd, bbls., 2,000-lb lots lb .59 —
1,000-lb lots lb 60 —
smaller lots lb 61 - —
tablets, tins, 2,000-lb lots lb 90 - —
1,000-lb lots lb 91 - —
smaller lots lb 92 —
Canada balsam (see Fir balsam)
Cantharides, Chinese cs lb 2.00 2.05
powd. bxs lb 2.25 2.30
Russian, bgs lb 4.00 4.05
powd. bxs lb 4.35 4.40
Capsicum (see Pepper red).
Oleoresin NF from domestic pepper dms lb 4.50 5.25
from African pepper, dms lb 4.35 5.00
Caraway seed, Dutch, bgs lb. .17 - —
Carbazole 97% bbls ton lots, works lb 1.05 - —
Carbon black (see Black, Carbon).
Dioxide, indust., wholesale, bulk, dlvd Metropolitan area ton.73.00 -115.00
cyls, same basis lb. .08 .09
solid, same basis lb. .035 .040
Disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .07 - —
i.c.l. same basis lb. .08½- .09
5-gal dms. 30 dms to c.l., same basis lb. .13 - —
less than 30 dms lb. .16 - —
tanks, dlvd. lb. .0545- —
Tetrachloride, CP, consumers, dms., l.c.l., frt. alld lb. .12¼- .14½
tech. consumers dms. c.l., frt. alld lb. .11¼- —
i.c.l. frt. alld lb. .13½- —
tanks, frt. alld lb. .10 - —
Carboxymethyl cellulose (see CMC).
Carbromal NF dms. 100-lb lots, works lb 4.00 4.25
smaller lots, works lb 4.10 4.75
Cardamom seed, bleached "A" lb 3.20 - —
"B" lb 3.10 - —
decorticated, Ceylon, cs lb 3.00 - —
Guatemalan, cs lb. 3.00 - —
green, Alleppey, bgs lb. 2.15 - —
Ceylon, bgs lb. 2.15 - —
Carmine, No 40, NF, bulk, 100-lb lots or more, dlvd lb.16.80 - —
smaller lots, dlvd lb.16.90 -17.30
Carotene, tech., 1,350,000 A units per gram tins 5-10 kilo lots, dlvd gram. .295 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
microcrystalline in oil, 400,000 A units per gram dms, dlvd, million units. .21 - —
b-Carotene, pure crystalline, 1,600,000 A units to 1,670,000 per gram cns gram. .35 - —
in vegetable oil, 400,000 A units per gram cns. gram. .084 - —
Carvol, bots lb 4.50 8.00
Cascara sagrada bark, bulk lb. .36 - —
Casein, dom. acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point lb. .32 Nom.
premium, bgs., 10,000-lb. lots or more, shipt. point lb. .38 Nom.
imp., acid-precip., grd., Argentine bgs., c.l., duty paid lb. .22½- .23
New Zealand, duty paid lb. .24 - .25
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J lb. .22 - —
ton lots, same basis lb. .23 - —
dm. lots, same basis lb. .25 - —
Cassia, Batavia, "A," bls. lb. .22 - —
"B" lb. .21 - —
"C" lb. .20 - —
Cassia, Corinje, "A" lb. .20½- —
"B" lb. .19½- —
"C" lb. .18 - —
Castor beans, bgs., f.o.b. Brazil ton.185.00 Nom.
Oil (see Oil, castor)
Pomace, bgs., c.l., works ton.45.50 - —
Castoreum, nat., cns lb. 5.25 -30.00
syn., cns lb. 9.00 —
Catechol, CP, cryst., fib. dms., works lb. 2.17½- —
resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls lb. .75 - —
Celery seed, French, bgs lb. .41 - —
Indian, bgs. lb. .21 - —
Cellulose acetate, flake, powd., ctns., bgs. 100-lb lots or more, dlvd, E lb. .35 - .46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd, E lb. .545 - .555
27% butyryl content, bgs., dlvd, E lb. .595 - .605
38% butyryl content, bgs., dlvd, E lb. .545 - .555
50% butyryl content, bgs., dlvd, E lb. .585 - .595
half-second, bgs, dlvd, E, lb. .548 - .555
Scrap (see Pyroxylin scrap).
Cerium chloride, 48% dms., dlvd. lb. .30 - —
Hydrate 74% CeO_2, fib. dms., 100-lb lots or more lb. 1.44 - —
77% CeO_2, fib dms., 100-lb. lots or more lb. 1.74 - —
Oxalate, NF, 48% bgs., works lb. 1.00 - —
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb 1.85 - 1.98
smaller lots, dlvd lb. 2.03 - 2.23
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. .85 - .95
Roman, cs. lb. 2.30 - 2.75
Charcoal, activated, NF, fib, dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .26½- .32½
smaller lots, works lb. .27 - .50
Bone (see Black, bone).

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- Catalytic properties of various inorganic bromides in reactions involving intramolecular rearrangements.

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† A joint-venture project of Michigan Chemical Corporation and Murphy Corporation of El Dorado, Arkansas

Charcoal, hardwood, bulk, lump, c.l., f.o.b. plant	ton	55.00	—
briquets, bulk, c.l. f.o.b. plant	ton	75.00	80.00
5 lb. paper bags, c.l., same basis	ton	108.00	—
10 lb. paper bags, c.l., same basis	ton	95.00	98.00
25 lb. paper bags, c.l. same basis	ton	82.00	88.00
40 lb. paper bags., c.l., same basis	ton	81.00	85.00
Pinewood, gran., bgs., c.l., works, South	ton	57.00	—
l.c.l., works, South	ton	57.00	67.00
lump, bgs., c.l., works, South	ton	53.50	—
l.c.l., works, South	ton	56.50	71.00
bulk, c.l., works, South	ton	38.00	—
t.l., works, South	ton	41.00	—
Chestnut extract, solid, 60% tannin, bgs., exdock, plus duty	lb.	.0933	—
powd., 70% tannin, bgs., exdock, plus duty	lb.	.1085	—
Chloral tech. 94% min. dms., c.l., works	lb.	.23	—
l.c.l., works	lb.	.24	—
tanks, multiple units, 5 cars, works	lb.	.21	—
Hydrate, USP, 1,000-lb. lots	lb.	.83	—
500-lb. lots	lb.	.88	—
100-lb lots or less	lb.	.93	—
Chloramine I NF, bbls works	lb.	.75	1.00
Chlordan, agricultural dms., c.l., frt alld	lb.	.65	—
t.c.l. 5,000 to 10,000-lb. lots, frt alld	lb.	.66	—
clarif., dms., c.l., frt alld	lb.	.69	—
l.c.l. 5,000 to 10,000-lb. lots, frt alld	lb.	.70	—
Chlorinated paraffin, 42%, dms., c.l., frt alld	lb.	.16¼	—
t.c.l. same basis	lb.	.17¼	—
70%, dms., c.l., same basis	lb.	.18¾	—
l.c.l., same basis	lb.	.19¾	—
Rubber 5, 10, 20 cps. ctns., c.l., works	lb.	.55	—
t.c.l., works	lb.	.56	—
125, 1,000 cps., ctns., c.l., works	lb.	.65	—
t.c.l., works	lb.	.66	—
Chlorine, liq., cyls., c.l., works, frt. equald	lb.	.10¼	—
t.c.l. Metropolitan area	lb.	.11¾	.13
tanks, single units, works, frt. equald	100 lbs.	3.15	—
multiple units, 5 cars, works, frt. equald	100 lbs.	4.05	—
3 cars, same basis	100 lbs.	4.25	—
2 cars, same basis	100 lbs.	5.25	—
1 car, same basis	100 lbs.	7.25	—
4-Chloro-2-aminotoluene fused bbls.	lb.	1.45	—
m-Chloroaniline, dms., min. 10,000 lbs or over, frt alld	lb.	.75	—
less than 10,000 lbs., same basis	lb.	.80	—
tanks, same basis	lb.	.73	—
o-Chloroaniline, dms. c.l., frt. alld.	lb.	.65	—
t.c.l., same basis	lb.	.67	—
tanks, same basis	lb.	.63	—
p-Chloroaniline dms c.l. frt. alld.	lb.	.77	—
t.c.l., same basis	lb.	.79	—
o-Chlorobenzaldehyde, dms., t.t., works	lb	1.05	—
t.t.l., works	lb.	1.20	—
p-Chlorobenzaldehyde, dms., c.l., works	lb.	1.95	—
Chloroform tech. dms. c.l. divd. E	lb.	.18	—
t.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.17	—
USP, dms	lb.	.30	—
2-Chloro-4-nitroaniline, paste, divd. E., 100% basis	lb.	.81	—
powd. divd E. 100% basis	lb.	86	—
4-Chloro-2-nitroaniline powd. divd. E	lb.	.80	—
o-Chlorophenol dms. c.l. frt. equald.	lb.	.37	—
t.c.l., same basis	lb.	.38	—
p-Chlorophenol, dms., c.l., frt. equald.	lb.	.37	—
t.c.l., same basis	lb.	.38	—
Chloropicrin, coml. bots	lb.	1.50	—
cyls., 180 lbs., frt alld	lb.	.95	—
100 lbs. same basis	lb.	.97	—
25 lbs., same basis	lb.	1.22	—
Choline bitartrate fib. dms., frt. adjusted	lb.	1.25	1.35
Chloride fib. dms., frt. adjusted.	lb.	1.25	1.35
Dihydrogen citrate fib. dms., frt. adjusted	lb.	1.25	1.35
Chromium acetate soln. 7½%, bbls., works	lb.	.09½	—
cbys. works	lb.	.11¼	—
Fluoride, bbls., works	lb	.51	.52
Green (see Green, chrome).			
Oxide (see Green chromium oxide)			
Trioxide, NF, bots	lb.	1.15	—
Yellow (see Yellow chrome).			
Cinchona bark NF red, broken, bgs	lb.	.35	.40
yellow, broken, bgs	lb.	.35	.40
Cinnamic aldehyde, dms	lb.	.95	1.25
Cinnamon, Ceylon, No. 2, bgs	lb.	.98	—
"0000," bgs., afloat	lb.	1.08	—
Citral, bots., cns	lb.	4.90	5.90
Citronellal, bots., dms	lb.	2.85	3.50
Citronellol, bots., dms.	lb.	4.30	4.60
Civet, artif, bots	lb.	13.75	15.00
nat., bots	oz.	8.50	15.00
Clay, ball dom., airfloated, bgs., c.l., Tenn	ton	19.50	—
crushed, shed moisture, bulk, c.l., Tenn	ton	10.00	—
purif., bgs., c.l., Tenn	ton	20.50	—
imp., airfloated, bgs., c.l., Atl port	long-ton	42.00	45.00
lump bulk Atl port	long-ton	27.00	30.20
China, dom., dry-grd., airfloat. 99% 325 mesh, bgs., c.l. Georgia works	ton	10.00	—
t.c.l. Georgia, works	ton	15.50	—
300 mesh., bgs., c.l., Georgia, works	ton	13.50	14.50
t.c.l., same basis	ton	35.00	36.00
imp., white, lump, bulk, c.l., ex-dock, Phila., Portland, Me	gross ton	20.00	35.00
powd. bgs. c.l. ex dock	net ton	50.00	—
t.c.l., ex whse	net ton	60.00	65.00
Clove, Madagascar, bgs	lb.	.42½	—
Zanzibar, bgs	lb.	.47	—
CMC, crude, 96%, low or medium, vis. bgs., or fib dms., 23,000 lbs. divd E. 100% basis	lb.	.39½	.41
less than 23,000 lbs., divd E., 100% basis	lb.	.41½	.43
65%, low or medium vis., bgs., or fib. dms., c.l., divd. E., 100% basis	lb.	.39½	.41
t.c.l. divd E 100% basis	lb	.41½	.43
purif., high vis (see Gum Cellulose).			
standard, low or medium vis., bgs. 23,000 lbs. or over, works, frt. alld	lb.	.55	—
smaller lots, same basis	lb	.57	—

CMC prices W of the Rockies are 2c per lb. lower and are on a works basis.

Coaltar crude, resale for soins., dms., c.l. ex-whse	gal.	.30½	—
l.c.l., ex-whse	gal.	.33½	—
tanks, ex works	gal.	.17	—
refd., resale, industrial, dms., c.l., ex-whse	gal.	.30½	.35
l.c.l., ex-whse	gal.	.33½	.39
tanks, works	gal.	.16½	.20½
Cobalt acetate 23.7% dms., dlvd.	lb.	1.20	—
Carbonate 46% powd. bgs., dlvd.	lb.	1.85	—
Chloride, 24.2% Co. dms., dlvd.	lb	1.20	—
Hydrate 60-61% Co., dms., dlvd	lb.	2.62	—
Linoleate, fused, 8½% Co., dms. liq., 6% Co. dms	lb.	.75¾	—
	lb.	61	—
Metal, 97-99%, kgs., ex whse	lb.	2.35	—
Naphtenate, liq. 6% Co., dms., dlvd	lb.	48¼	—
Nitrate, 20.1% Co., bbls., dlvd.	lb.	1.00	—
Oxide black, 72½-73½% Co., kgs	lb.	1.78	—
70-71% Co., kgs	lb.	1.73	—
Phosphate, powd., 32.1% Co., kgs., dlvd	lb	1.69	—
Resinate, fused 3% Co., dms.	lb.	29¾	—
Sulfate cryst. 21% Co., dms., dlvd	lb.	79	—
monohydrated, 33% Co., dms., dlvd	lb	1.32	—
Tallate 8% Co. dms. dlvd	lb	43¾	—
Cocaine, USP, cns. 100 oz. lots	oz.	17.80	—
Hydrochloride, cns., 100-oz. lots	oz.	13.75	—
Cocilana bark, bls.	lb.	.25	—
Cocoa butter, bgs	lb.	.66	.70
Codeine, NF cns., 100-oz. lots	oz.	13.25	—
Hydrochloride, cns., 100-oz lots.	oz.	11.75	—
Phosphate USP cns., 100-oz. lots	oz.	10.25	—
Sulfate USP cns. 100-oz. lots	oz.	10.75	—
Codliver oil (see Oil, codliver).			
Cohosh root, black, bls	lb.	.20	.22
blue, bls	lb.	.20	.22
Colchicine, USP, bots., cns.	oz.	29.00	35.50
Colchicum root, bls	lb.	.35	—
seed, bgs	lb.	.60	—
Collodion USP, dms.	lb.	.32½	—
flexible, dms	lb.	.34	—
Colocynth pulp, bls	lb.	.55	—
Colombo root, bls	lb.	.15	.16
Condurango bark, bales	lb.	.26	—
Copaiba balsam, cns., dms	lb.	.85	—
Copper acetate, bbls. c.l. works	lb.	.53	—
l.c.l., works	lb.	.54	—
Carbonate 55% bgs., c.l., works.	lb.	.35¾	—
t.c.l., works	lb.	.37¾	—
Chloride, cupric, anhyd., dms., works	lb.	.45¼	.45¾
cryst., dihydrate dms., works.	lb.	.30¾	.31¼
dried, dms., works	lb.	.39	.39½
cuprous, dms., works	lb.	.4540	.4890
Cyanide, tech., bbls., 20,000-lb. lots or more	lb.	.74½	—
1,000-lb. lots or more	lb.	.75½	—
smaller lots	lb.	.77½	—
Gluconate dms	lb.	3.15	3.35
Hydrate, dms., c.l., frt. alld. E. of Miss	lb.	.52½	—
l.c.l., same basis	lb.	.53	—
Copper metal, electrolytic, dlvd., Valley basis	lb.	.36	—
Naphthenate, liq. 8% Cu. dms., frt. alld	lb.	.24½	—
Nitrate tech. cryst. bbls. works.	lb.	33¼	—
Oleate, solid, 9% Cu. dms., works.	lb.	.43	—
Oxide, black, bbls., 100-2,000-lb. lots, works	lb.	.48½	.50½
red 97% USN Type I, bbls., 100-5,000 lb. lots	lb.	.64½	—
90% USN Type II, bbls., 100-5,000 lots or more works.	lb.	.62½	—
Oxychloride, dms. c.l., works	lb.	.53	—
l.c.l., works	lb.	.53½	.63½
Quinolinoiate fib dms	lb	4.25	4.50
Resinate, precip., dms., frt. alld.	lb.	.31½	—
Sulfate, CP, gran., dms., works.	lb.	.2080	—
cryst. 99% bgs. c.l. works.	100 lbs.	13.90	—
l.c.l., same basis	100 lbs.	14.90	16.90
monohydrated, 35%, dms., c.l., works	100 lbs.	23.75	—
t.c.l., works	100 lbs.	24.50	—
tribasic, dealers, bgs., c.l., works, frt. equald	100 lbs.	30.00	—
t.c.l., same basis	100 lbs.	31.00	34.00
Undecylenate, dms	lb.	2.00	3.00
Copra Atlantic Gulf ports, c.i.f	ton.	157.50	—
Pacific ports, c.i.f.	lb.	152.50	—

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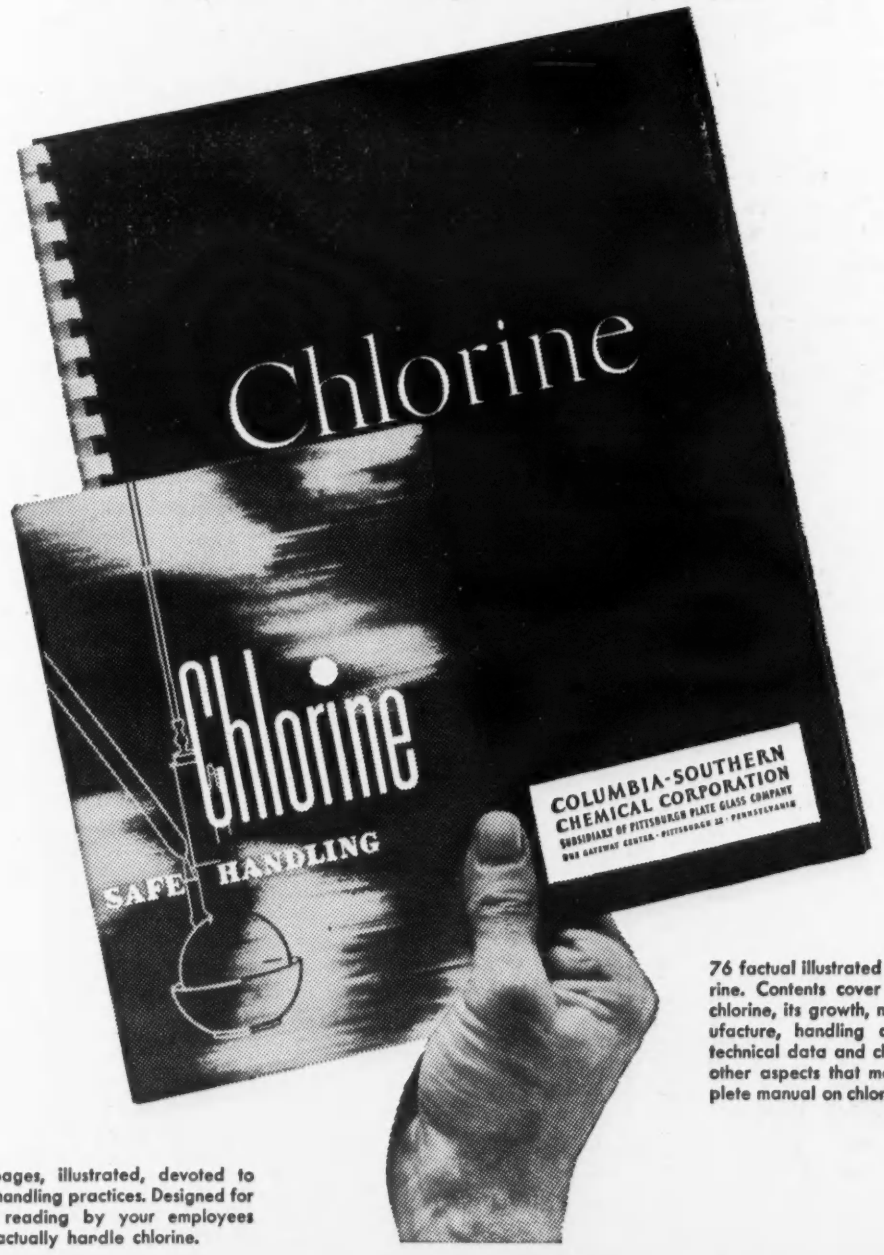

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Coriander Seed—Di-2-Ethylhexyl Adipate

Coriander seed, Moroccan, bgs lb .12 - —
Roumanian, bgs lb. 09 .09½
Yugoslavian bgs lb. .08½- —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs min 100 lbs. 7.32 - —
l.c.l. 100 lbs. 7.57 - —
Syrup, 42° non-ret dms c.l 100 lbs. 7.30 - —
l.c.l. 100 lbs. 7.45 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate NNR bulk gram 3.50 3.55
Cottonseed meal, 41% bgs., Memphis ton.58.00 -58.50
Cramp bark NF bls 85 .90
Coumarin, NF cryst dms lb 3.60 —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate NF bots chys lb 3.05 3.20
Coaltar crude tanks works frt adjusted gal. .24 - —
soln., 80%, tanks, works gal. .226 - —
refd. dms. c.l. works gal. 42 .44
l.c.l. same basis gal. 53 .55
tanks same basis gal 33 .35
Wood, beechwood, chys., dms lb 1.60 1.65
hardwood NF bots chys lb 1.30 1.35
pinewood, dms., c.l., incl ... lb. .0561- —
l.c.l. incl lb. .0634- —
N Y whse lb. .0745- —
tanks works lb .0460- —
Cresol tech 50% below 204 C., dry above 207 C wide distillation range non ret. dms., c.l. frt equald lb .1625- —
l.c.l. same basis lb. .1675- —
tanks same basis lb .145 —
USP, non-ret. dms., c.l., same basis lb. .1775- —
l.c.l. same basis lb .1825- —
tanks same basis lb .160 —
m-Cresol 95-98% dms c.l. works. lb .60 - —
l.c.l. works lb .61 - —
m-p Cresol 5-95% 3°C. dms., c.l. frt equald lb .1775- —
l.c.l. same basis lb .1625- —
tanks same basis lb .160 —
m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald lb. .2175- —
l.c.l same basis lb .2225- —
tanks same basis lb .200 —
o-Cresol, m.p. 30.5° C and over, ret. dms., c.l., frt. equald lb. .16¾- —
l.c.l., same basis lb. .17¼- —
tanks, same basis lb. .15 - —
30°-30.49° C., ret. dms., c.l., frt. equald lb. .16¼- —
l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .14½- —
29°-29.9° C., ret. dms., c.l., frt. equald lb. .15¾- —
l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .14 - —
o-Cresol, m.p., 25°-28.9°C., dms., c.l., frt. equald lb. .14¾- —
l.c.l., same basis lb. .15¼- —
tanks, same basis lb. .13 - —
p-Cresol, 98% dms. c.l. dlvd lb .50 - —
l.c.l. dlvd lb .51 - —
tanks dlvd lb .49 - —
Methyl ether, cns lb 1.80 2.05
Crotonaldehyde 91.93% dms., l.c.l. works lb 24¼ .25
Cryolite (... Indust., bgs., c.l., works 100 lbs.13.00 - —
l.c.l. works 100 lbs.14.25 - —
Cube root, powd. 5% rotenone bgs. c.l. t.l. works lb .29 - —
Cubeb berries, XX, NF, bgs lb .70 - —
powd., cs lb .85 - —
Cumene dms. c.l. works lb .12 - —
l.c.l. works lb .14 - —
tanks works lb .11 - —
l.c.l. works lb .30 - —
Cumin seed, Iranian, bgs lb. .18½- —
Moroccan, bgs lb. .22 - .23
Turkish, bgs lb. N.P.
Cutch extract 55% tannin bgs. ex dock duty extra lb 08½- —
Cyanamide fertilizer mixing grades, 21% N, gran, bgs., Niagara Falls Ont., contract ton 55.00 - —
pulv 21% N bgs works unit ton 2.75 - —
indust. grade, bgs., c.l., works.ton.75.00 - —
l.c.l., works ton.96.00 - —
6-16 mesh dms c.l. works.ton 120.00 - —
l.c.l., works ton.140.00 - —
Cyclohexane 99% tech. dms. c.l., works gal. 70 - —
l.c.l. works gal. 72 - —
tanks works gal 55 - —
Cyclohexanol tech., dms. c.l., works frt alld E lb .28 - —
l.c.l. works, same basis lb. .29 - —
tanks, works same basis lb .24 - —
Cyclohexanone tech dms., c.l., works lb .32½- —
l.c.l. works lb. .35 - —
tanks, works lb. .29 - —
Cyclohexene, min. 98% b.r., 82.5°C-85°C 360 lb dms., c.l., works lb .55 - —
l.c.l same basis lb .60 - —
tanks same basis lb. .52 - —
Cyclohexylamine dms. c.l. works lb. .49 - —
l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane CP 2-lb cyls works cyl.48.00 - —
6 oz cyls., works cyl 12.00 - —
USP hospitals cyls. 40-gal lots, gal. .38 - —
100-gal lots gal. .37 - —
200-gal lots gal. .36 - —

D

2-4-D tech. dms. c.l. works, frt. equald lb. .37 - —
l.c.l., same basis lb .42 - .46
Butyl ester dms. c.l., works lb. .40 - —
l.c.l. same basis lb. .45 - .49
tanks same basis lb. .39 - —
Isopropyl ester dms. c.l., works.lb .40 - —
l.c.l., works lb. .45 - .49
tanks, works lb. .39 - —
Dandelion root, bls lb. .32 - —
DDD, tech. flake, grd fib dms., c.l. works lb. .45 - —
l.c.l. works lb .46 - —
DDT powder bgs c.l. works, frt equald lb .23 - .27
smaller lots same basis lb .24 - .28
fib dms., c.l., same basis lb. .24 - .28
smaller lots same basis lb .25 - .29
1-Decanol tech dms. c.l. dlvd lb .41 - —
l.c.l dlvd lb .43 - —
tanks dlvd lb .38½- —
Deertongue leaves bls lb .45 - —
Defluorinated phosphate feed grade 13% P paper bgs., c.l., t.l., works ton 49.50 - —
17%P paper bgs. c.l. t.l. works ton 58.00 - —
18% P paper bgs. c.l. t.l. works ton 64.10 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices

Degras, common, bbls lb. .10 - .12
neutral, bbls lb. .21 - .23
d-Desoxyephedrine hydrochloride, bots lb 24.00 - 25.00
dl, bots lb 6.50 —
Dextrin, corn, gum, paper bgs. c.l 100 lbs. 9.33 - —
l.c.l. 100 lbs. 9.48 - —
canary, dark, paper bgs., c.l 100 lbs. 9.17 - —
l.c.l. 100 lbs. 9.32 - —
light paper bgs., c.l. 100 lbs. 9.07 - —
l.c.l. 100 lbs. 9.22 - —
white paper bgs., c.l. 100 lbs. 8.91 - —
l.c.l. 100 lbs. 9.06 - —
Corn dextrin in cotton bgs 15c per 100 lbs higher
Potato imported bgs lb 10½ 11
Dextrose USP dms lb 17¾ —
Diacetone (see Alcohol diacetone)
Diacetyl flavor grade bots lb 4.25 5.50
Di-sec-amyl phenol, dms., c.l., works lb .32 —
l.c.l. works lb .33 —
tanks, works lb 29½ —
Di-tert-amyl phenol, dms., l.c.l., works lb .32 —
l.c.l. works lb .33 —
tanks, works lb 29½ —
o-Dianisidine fib dms lb 2.00 —
Dibenzyl sebacate, dms., c.l., works. lb 89¾ 90
l.c.l. same basis lb. 90¼ 91
tanks, same basis lb 88 —
p-Dibromobenzene bgs. 500-lb lots. lb .55 —
Dibutyl phthalate, dms., c.l. dlvd. E lb. .32¼- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30 —
Sebacate, dms., c.l., works lb. .66 - —
l.c.l. works lb. .66¼- .67
tanks, works dlvd lb .64 .64½
Tartrate dms works frt alld lb .64 —
Dibutylamine, dms., c.l. dlvd lb. .55½ —
l.c.l. same basis lb. .56½- —
tanks, same basis lb. 53 —
2,6-Di-tert-butyl-p-cresol, food grade, dms. t.l. c.l., dlvd lb 1.20 - —
t.t.l. dlvd lb 1.24 - —
tech., dms., c.l. lb. .91 - —
l.c.l. lb. .95 - —
tanks lb. .86 - —
Dicaprvl phthalate dms. c.l. dlvd. lb. .31 .32
l.c.l. dlvd lb. .32 .33
tanks, dlvd lb. .27½- —
Sebacate dms., c.l., works lb. .63 - —
l.c.l. works lb .63½- .64
tanks, works lb .61 —
2,5-Dichloroaniline dms., works lb 83 —
o-Dichlorobenzene dms. c.l., frt. alld E lb .12¼ —
l.c.l. same basis lb. .13¼- —
tanks, same basis lb .10¾- —
p-Dichlorobenzene, dms., c.l., f.o.b., works lb. .12 - .14½
l.c.l. same basis lb .17 —
1,4-Dichlorobutane dms. c.l or t.l., works lb. .33¼- —
l.c.l. or t.t.l. works lb .34 - —
tanks, works lb .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
Dichloropentanes dist., dms., c.l., works lb .05 - —
l.c.l. works lb. .06 - —
tanks works lb. 03 - —
Dicyclohexylamine, dms. c.l., works. lb. .54 - —
l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib, dms., c.l., works, frt alld lb. .88¼ .89
l.c.l. same basis lb. .89¼ .90
Didecyl phthalate dms. c.l., works. lb. .34 - —
l.c.l. same basis lb. .35 - —
tanks same basis lb. .31½- —
Dieldrin dms. frt alld lb 1.80 - —
l.c.l., frt alld lb 1.85 - —
Diethanolamine, dms. c.l., dlvd, E. lb. .27 - —
l.c.l. same basis lb. .28 - —
tanks same basis lb. 24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l. same basis lb. .48 - —
tanks same basis lb. .45 - —
Ethanolamines, dms. c.l. dlvd.lb. .69½- —
l.c.l. dlvd lb. .70½- —
tanks dlvd lb .67 - —
Oxalate dms., c.l., frt. alld lb. 42 - —
l.c.l same basis lb. .43 - .45
tanks same basis lb. .40 —
Phthalate, dms., c.l., dlvd lb. .30 - .30½
l.c.l., dlvd lb. .31 - .31½
tanks, dlvd lb .27½- .28
Sulfate, dms., c.l., works lb. .19 - —
l.c.l. works lb. .19¾- —
tanks, works lb. .17 - —
Diethylamine, dms., c.l. dlvd. E lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).

Dow

In their brief but exciting history, chelating agents have encountered reactions ranging from scoffs and disbelief to overzealous exaggeration about their application. But the air is clearing. Already they are serving as important tools in many industrial processes. This is the beginning of a series on chelating agents designed to further clarify what they are, what they will do—and won't do.

The Chemistry of Chelation: Part I

Chelation defined · Example of the reaction · Variety of applications · Future of chelating agents

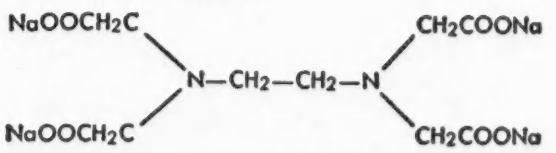
Polymerization of synthetic rubber controlled . . . soap kept white and sparkling on the dealer's shelf . . . textiles bleached and dyed with permanent uniform colors . . . pharmaceuticals stabilized. Unrelated reactions? Certainly. However, all are accomplished by a group of closely related chemicals called chelating agents. How do they work? Well, it's not magic, but chemistry—in a way, fairly basic chemistry. But let's begin at the beginning.

What Is Chelation?

Let's look at the word chelation. It is derived from the Greek word *Kelos* which means "claw." Simply stated, a chelate is a claw which holds a metallic ion inactive in solution. Chemically stated, chelation is a chemical reaction in which polyvalent metallic ions are reacted with organic reagents (chelating agents) to chemically inactivate these polyvalent metallic ions in the form of an extremely stable, water-soluble chelate.

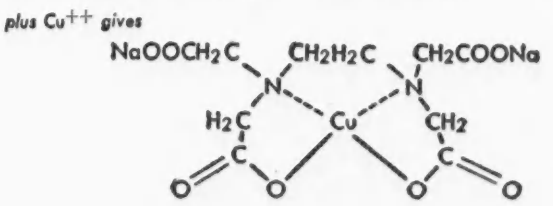
Typical Reaction

If we examine a typical reaction, the process of chelation becomes quite clear. Let us take, for example, the chemical structure of Versene®, one of the Dow chelating agents.



Versene

Now, if we place the Versene in a solution which contains free polyvalent ions of copper (Cu^{++}), the following is the result:



Versene Copper Chelate

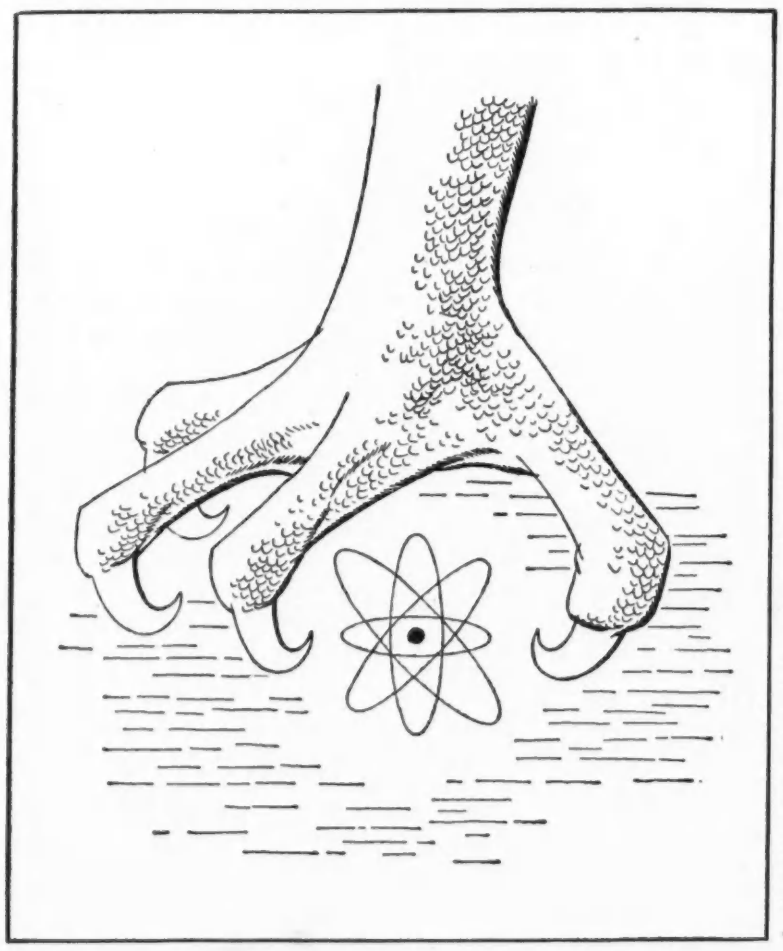
The resultant compound is Versene copper chelate. The copper ion has become a member of an inner ring structure in the molecule. The result?

Diethylene glycol dms., c.l., dlvd E lb. .17¾- —
l.c.l. same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Boriborate, dms. l.c.l. lb 31 —
Diethyl ether dms. c.l., works lb 47½- —
l.c.l., works lb. 48¼- —
Monobutyl ether dms. c.l., dlvd E lb .30¾- —
l.c.l. dlvd E lb 31¾- —
tanks, dlvd E lb 28¼- —
Acetate, dms., c.l., works. lb. .30¼- —
l.c.l. works lb. .31 - —
tanks, dlvd E lb 28¼ - —
Monoethyl ether, dms., c.l., dlvd lb. .22½- —
l.c.l., dlvd lb .23½- —
tanks, dlvd lb 20 - —
Acetate, dms., c.l., works. lb. .27¼- —
l.c.l., works lb .28 - —
tanks, dlvd E lb. 25¼ - —
Monomethyl ether dms., c.l. dlvd lb 20½- —
l.c.l., dlvd lb .21½- —
tanks, dlvd. lb. .18½- —
Diethylenetriamine dms. c.l. dlvd E lb. .44 —
l.c.l. dlvd E lb. .45 - —
tanks, dlvd E lb 41½- —
Diethylstilbestrol, USP, bots. 10 kilo lots kilo. 100 00 147 50
1 kilo lot kilo. 110 00 152 50
Digitalis leaves USP dom dms lb. 1.35 - —
Digitoxin, USP, bots gram. 4.75 5.25
Diglycol laurate, dms lb. .32¾- .34
Stearate, dms., ton lots lb. .26 .28
Dihexyl sebacate dms. c.l., works. lb 64 —
l.c.l. works lb. 64½- .65
tanks, works lb 62 —

Dihydrazine sulfate, dms., works lb 1.10 1.25
Dihydrostreptomycin hydrochloride bulk gram. .0850- .0875
Sulfate, bulk gram. .0850- .0875
1,2-Dihydroxy anthraquinone, dms., works lb 2.75 —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb 2.55 —
tech., dms lb 1.09 —
Di-isobutyl ketone, dms. c.l. dlvd. lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½- —
Phthalate, dms., c.l., dlvd. E lb. .31½- —
l.c.l., same basis lb. 32½- —
tanks, same basis lb. 29 - —
Di-isobutylene, dms., c.l., dlvd. E. lb. .10 - —
l.c.l. dlvd. E lb 11 —
tanks, dlvd E lb. 08 —
Di-iso-octyl pntnalate, dms., c.l., dlvd lb. .31 - —
l.c.l., same basis lb. .32 - —
tanks, same basis lb. .28½- —
Sebacate, dms., c.l. works lb. .63½- —
l.c.l., works lb .64½- —
tanks, works lb 61 —
Di-isopropylamine, dms., c.l., dlvd. lb. .23¼- —
l.c.l. same basis lb. .24¼- —
tanks, same basis lb 20¾ —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48 - —
Dill seed, dewhiskered, bgs lb. .09¼- —
nat., bgs lb. .08 - —
Dimethyl anthranilate, cns lb. 4.35 - 5.10
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —

Dimethyl ethanolamines, anhyd., dms., c.l., dlvd lb. 1.225 - —
l.c.l., dlvd lb. 1.235 - —
tanks, dlvd lb 1 20 —
70% dms c.l. dlvd, 100% basis contained amines lb 68½- —
l.c.l. dlvd. 100% basis lb 69½- —
tanks, dlvd 100% basis lb 66 - —
Hydroquinone, dms lb 2.20 2.25
Phthalate, dms. c.l., works lb. .31 - —
l.c.l., works lb. .32 - —
tanks, works lb. .28½- —
Sebacate dms. c.l. works lb 1.275 —
l.c.l. dlvd lb 1.285 —
tanks works lb 1.25 —
Sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
l.c.l. works lb 16 —
10-gal ret dms. l.c.l. works lb 16½ —
Dimethylamine 25% soln dms. c.l. frt equald lb 42 —
l.c.l. frt equald lb 42½- —
tanks frt equald lb 33 —
40% soln dms. c.l. frt equald lb 39 —
l.c.l. frt equald lb 39½- —
tanks frt equald lb 34 —
N,N-Dimethylaniline dms. c.l., frt alld lb. .32 - —
l.c.l. frt alld lb. .33 - —
tanks, frt. alld lb. 30 - —
N,N Dimethylformamide dms. works lb .34 .39
tanks works lb 32 —
2,4-Dinitroaniline dms. 1,000-lb. lots, same basis frt equald lb 68 —
smaller lots, frt equald lb 71 —

m-Dinitrobenzene 85°C., dms lb 22 - —
89°C., dms lb 24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms. c.l., frt alld E lb 15¼ —
l.c.l., frt alld E lb 15¾ —
tanks, frt alld E lb 15 —
2,4-Dinitrochlorobenzene, crystallizing at 48°C. dms., c.l., frt alld E lb 20¼ —
l.c.l. frt alld E lb 20¾ —
tanks frt alld E lb 20 —
2,4-Dinitrophenol bbls lb 37 —
2,4-Dinitrotoluene, oily dms lb 11 —
refd. 63°C. dms lb 23 —
Dioctyl adipate dms. c.l. works lb 42½ —
l.c.l. works lb 43½ —
tanks works lb 40 —
Phthalate, dms., c.l., frt. alld lb. .30½- .31
l.c.l., frt. alld lb. .31½ .32
tanks, frt. alld lb. .28 - .28¼
Sebacate dms., c.l. works lb 60½ —
l.c.l. works lb 61½ 62½
tanks works dlvd lb 58 58½
1,4-Dioxane dms., c.l. works lb 25¾ —
l.c.l. same basis lb 29¼ —
tanks same basis lb 27 —
Dip oil (see Tar acid oil)
Dipentaerythritol bgs. l.c.l. works lb 35 —
Dipentene dest-dist. dms., c.l. works gal 47 —
l.c.l., works gal. 52 - —
ex-whse gal 62 —
steam dist dms., c.l., works, South gal 59 —
dlvd N Y gal. 67 —
tanks, works, South gal 45 —
Diphenyl bbls c.l. works lb 15 —
l.c.l. works lb 16 —
Diphenyl in bags ¼c lower
Oxide, perfume grade cns lb 56 61
Phthalate dms. c.l. works lb 51¾ —
l.c.l. works lb 53¾ —
Diphenylamine refd. flake bgs., c.l. works frt equald lb. .33 - —
l.c.l., works, frt equald lb. .35 - —
fused tanks works frt equald lb. .31 —
tech fused tanks works, frt equald lb. .30 —
Diphenylguanidine bgs., dms., ton lots, frt. alld lb. .52 —
smaller tots, frt. alld. lb. .53 —
Diphenylhydantoin-sodium USP dms lb 5 00 5 60
Dipropylene glycol dms. c.l., frt alld lb. .17¾- —
l.c.l., same basis lb. .18¾- —
tanks same basis lb 15¼ —
Monomethyl ether dms., c.l., dlvd E lb 20 —
l.c.l. same basis lb 21 —
tanks same basis lb 18½ —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb .62 —
smaller lots. frt alld lb .63 —
Divi-divi, 45% tannin, bgs., bls., c.l., U. S. ports, exdock ton. 80.00 - —
Divinylbenzene 20-25% dms. c.l., works frt equald lb 20 —
l.c.l. same basis lb 21 —
tanks same basis lb 19 —
50-60% dms. c.l. works, 100% basis lb 1 00 —
l.c.l. works 100% basis lb 1 05 —
Dodecylbenzene dms. c.l., frt alld lb 14 —
l.c.l. same basis lb 15 —
tanks same basis lb 12 —
Dyes coaltar certified colors for food drugs and cosmetics 500-lb and 1-lb lots dlvd:—
Blue FD & C No 1 lb 15 65 17 60
No 2 lb 15 65 17 60
Green FD & C No 1 lb 15 65 17 60
No 2 lb 19 60 22 85
No 3 lb 21 30 35 90
Red FD & C No 1, cns lb 3 90 4 85
No 2 lb 3 30 4 10
No 3 lb 19 60 22 85
No 4 lb 5 55 7 50
Violet FD & C No 1, cns lb 15 65 17 60
Yellow FD & C No 1, cns lb 9 15 11 05
No 5 lb 3 30 4 10
No 6 lb 3 30 4 10
Dyes, coaltar certified colors for drugs and cosmetics 200 lb and 1 lb lots dlvd:—
Black D&C, No 1 lb 10 50 10 95
Brown D&C No 1 lb 15 65 16 10
Green D&C No 5 lb 15 65 16 10
No 6 lb 15 65 16 10
No 7 lb 14 35 14 80
Dyes coaltar certified colors for drugs and cosmetics, 1-lb lots works 25-50 lb lots dlvd:—
Orange D&C No 3 lb 19 50 19 95
No 4 lb 19 60 20 05
No 5 lb 5 95 8 70
Red, D&C, No. 17 lb. 10.50 -10.95
No 18 lb 23 50 24 00
No 19 lb 15 00 15 45
No 21 lb 3 10 3 60
No 22 lb 10 50 10 95
No. 28 lb. 24.20 -24.65
No 33 lb 16 99 17 45
Violet, D&C No 2 lb 15 65 16 10
Yellow D&C No 7 lb 10 50 10 95
No 8 lb 10 50 10 95
No 10 lb 13 05 13 50
No 11 lb 13 05 13 50
Dyes coaltar certified colors for drugs and cosmetics external use, 500-lb. and 1-lb. lots dlvd.:—
Blue Ext D&C No 1 cns lb 15 65 16 10
Green Ext D&C No 1 cns lb 15 65 16 10
Red Ext D&C No 1 cns lb 13 05 13 50
Yellow Ext D&C No 1 cns lb 10 50 10 95
Dyes coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd. No
20 Chrysoidine Y dustless lb .89 —
27 Fast light, orange 2G lb. 1.29 - —
31 Phloxine 2G lb. 1.05 - —
36 Yellow 2G lb. 1.18 - —
40 Orange R, extra, conc lb. 1.52 - —
57 Fuchsine 6B lb. 1.55 - —
79 Scarlet 2R lb. 1.16 - —
151 Orange AD lb. .79 - —
161 Orange RR lb. .94 - —
176 Fast red A lb. 1.39 - —
179 Rubine XX, conc lb. 1.48 - —
180 Blue F4B lb. 1.31 - —
185 Brilliant scarlet 3RN, conc. lb. 1.20 - —
202 Chrome blue black R, conc. lb. 1.07 - —
203 Chrome black T lb. .94 - —
208 Fast blue SR lb. 1.30 - —
216 Chrome red B lb. 1.06 - —
234 Brown Y lb. 1.27 - —
246 Blue black, extra, conc lb. 1.37 - —
275 Milling red 3R, conc lb. 1.91 - —
289 Navy blue 3R, conc lb. 1.70 - —
299 Black F, conc lb. 2.19 - —
304 Neutral black 2B, conc. lb. 2.61 - —
326 Fast scarlet 4BNC lb. 2.12 - —
332 Bismark brown RX, conc., dustless lb. 1.37 - —
365 Brilliant yellow, conc lb. 3.67 - —
382 Scarlet B lb. 2.60 - —
401 Diazo black BHD lb. .93 - —



They can descale boilers, soften water and cure acute lead poisoning. The number of current industrial and medical applications is large, but the potential in unexplored areas is enormous.

And the Future?

The future of these products will hinge on the imagination and insight of chemists and engineers, of production men and purchasing agents, in nearly every industry. Wherever metal contamination poses a problem or wherever controlled introduction of metal ions is desirable, these chemicals warrant investigation.

Versene and other Dow chelating agents won't solve them all. Chelation is not a panacea. It will work chemically in some areas—it will fail in others. However, it is Dow's intention to assist in every way in the uncovering of processes in which chelating agents can be profitably used. Inquiries on your company letterhead will be handled with dispatch. We will be pleased to provide information and technical assistance. Write to Technical Service and Development, Dept. CA 900F, THE DOW CHEMICAL COMPANY, Midland, Michigan.

It is inactivated. It cannot react with soap to cause darkening and stain during storage.

It can't cause breakdown of pharmaceuticals. It can't cause any trouble anywhere because it is locked in the Versene claw. It will stay locked in unless it is desired to reverse the process. This reverse action is used in polymerization of synthetic rubber—ions of iron being released at a predetermined rate by the chelate.

Variety of Applications

The most important thing, however, is that this "claw" property of chelating agents such as Versene makes it possible to solve a multitude of processing problems in industry. They've been used in tanning leather and tenderizing peas.

The next three topics in this series

PART II The Versene and Versenol® series of Dow chelating agents (what they are, strength and stability features—Versenol lower cost, less strength). Also—how chelating agents are specified (product performance versus chemical composition).

PART III Specific chelating agents for specific applications—(agent for iron control depends on pH—Versene Fe-3 Specific® for iron and transition metals on the alkaline side, Versene T® for iron in presence of free caustic—other solutions to special problems).

PART IV Applications in specific industries (formulation of alkaline cleansers—stabilization of hydrogen peroxide and Kier boiling in textile processing—uniform control of metal trace catalysts in polymerization of synthetic rubber—other industrial applications).

YOU CAN DEPEND ON DOW

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd No

406	Blue 2B, extra conc	lb.	1.53	—
419	Red FC	lb.	1.45	—
420	Brown M	lb.	1.40	—
448	Red 4BX, conc	lb.	1.69	—
518	Diamine sky blue FF, extra, conc	lb.	1.95	—
561	Brown B	lb.	2.89	—
581	Black EB, 200%	lb.	1.13	—
593	Green BY, conc	lb.	1.03	—
596	Yellow brown K, extra	lb.	1.26	—
620	Yellow 2G	lb.	1.31	—
639	Fast Yellow GG	lb.	2.32	—
640	Yellow XX	lb.	2.30	—
655	Yellow OX	lb.	2.64	—
657	Green V	lb.	2.73	—
662	Brilliant green G	lb.	3.62	—
667	Milling green 6B, conc	lb.	4.78	—
671	Blue EG	lb.	1.98	—
681	Crystal violet powder	lb.	2.15	—
698	Violet 6BN powder	lb.	2.25	—
720	Brilliant blue BBG	lb.	2.44	—
729	Blue B, extra conc	lb.	3.61	—
749	Red BX	lb.	5.62	—
800	Chinoline yellow ZSS	lb.	2.67	—
814	Yellow NN, conc	lb.	3.67	—
841	Safranine GF, extra, conc.	lb.	4.11	—
860	Induline base ZM	lb.	1.07	—
865	Nigrosine J	lb.	4.76	—
922	Blue GXX	lb.	2.22	—
978	Black GXCF, conc	lb.	.38	—
1034	Alizarine red SC	lb.	2.85	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd No

1054	Alizarine blue SAPX	lb.	3.78	—
1078	Alizarine green CG, extra	lb.	3.53	—
1085	Alizarine blue black B	lb.	3.02	—
1096	Golden orange GFD, single paste	lb.	2.58	—
1099	Dark blue BO, single paste	lb.	2.28	—
1101	Jade green N supra double paste	lb.	1.10	—
1106	Blue RS, double paste	lb.	3.85	—
1113	Blue BLFD, double paste	lb.	2.93	—
1150	Olive R, single paste	lb.	1.42	—
1151	Brown R, single paste	lb.	2.29	—
1171	Indigo synthetic 20% paste	lb.	.31	—
1217	Orange RD, double powder	lb.	4.60	—
	p-4 Brown PG	lb.	3.00	—
	p-14 Brown EB	lb.	2.16	—
	p-24 Gray L	lb.	2.08	—
	p-80 Diazo brilliant scarlet ROAD	lb.	3.62	—
	p-202 Diazo black VJ, conc	lb.	2.48	—
	p-244 Brilliant scarlet BN	lb.	1.70	—
	p-313 Naphthol SWF	lb.	2.24	—

Dyes, coaltar, oil-soluble, 100-lb. drums., dlvd.

	24 Oil orange Z-7078	lb	1.06	—
	73 Oil scarlet BL	lb.	1.70	—
1073	Oil violet ZIRS	lb.	6.81	—
1078	Alizarine cyanine green base Z	lb.	6.13	—
1080	Oil violet special Z	lb.	6.81	—
	Oil black ZBC	lb.	4.46	—
	Oil black ZBD	lb.	3.03	—
	Oil black ZHB	lb.	4.61	—
	Oil black ZMM	lb.	6.52	—
	Oil blue ZN	lb.	8.02	—
	Oil blue ZV	lb.	4.95	—
	Oil orange ZMG	lb.	1.32	—
	Oil red Z-1700	lb.	1.49	—
	Oil yellow ZG, conc	lb.	6.33	—

Dyes, coaltar, spirit soluble, 100 lb. drms. dlvd.

p-517	Spirit yellow ZR	lb.	4.62	—
p-520	Spirit orange ZR, conc	lb.	5.87	—
	Spirit black ZRB	lb.	2.95	—
	Spirit brown ZG	lb	5.30	—
	Spirit red ZB, conc	lb.	6.41	—

E

Echinacea root, bls	lb	1.10	—
Egg albumin (see Albumin).			
Yolk, dried, dom., bbls	lb.	1.05	1.07
tanners, bbls	lb.	.06	.06½
Elm bark, grinding, bls	lb.	.30	.32
powd., bbls., bxs	lb.	.45	—
select, bundles	lb.	.75	—
Emetine hydrochloride, USP, bots	oz.	48.25	49.00
Endrin, tech., dms., dlvd., 100% basis	lb.	3.75	—
Ephedrine, syn., USP, anhyd., bots., 100-oz. lots	oz.	.98	1.00
hydrous bots., 100-oz lots	oz.	.92	—
Hydrochloride, tins, 100-oz. lots	oz.	.65	.75
Sulfate, cryst., tins, 100-oz. lots	oz.	.65	.72
powd., tins, 100-oz. lots	oz.	.66	.73
Epichlorohydrin, dms., c.l., dlvd	lb.	.35	—
l.c.l., dlvd	lb.	.36	—
tanks, dlvd	lb.	.33	—

l-Epinephrine, base, syn., USP, bots., 100 gram lots

	gram.	.60	—

Epsom salt (see Magnesium sulfate).

Ergot, NF, dms., tin-lined	lb.	2.00	—
Eserine salicylate, bots	oz.	72.50	84.00
Sulfate, bots	oz.	87.75	—

Ether (see specific product).

Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld	lb.	.14½	—
l.c.l., frt. alld	lb.	.15½	—
tanks, frt. alld	lb.	.12	—
95-98%, dms., c.l., frt. alld.	lb.	.14¾	—
l.c.l., frt. alld	lb.	.15¾	—
tanks, frt. alld	lb.	.12¼	—
99%, dms., c.l., frt. alld.	lb.	.15	—
l.c.l., frt. alld	lb.	.16	—
tanks, frt. alld	lb.	.12½	—
syn., 85-88%, dms., c.l., dlvd.	lb.	.14½	—
l.c.l., dlvd	lb.	.15½	—
tanks, dlvd	lb.	.12	—
95-98%, dms., c.l., dlvd	lb.	.14¾	—
l.c.l., dlvd	lb.	.15¾	—
tanks, dlvd	lb.	.12¼	—
99%, dms., c.l., dlvd	lb.	.15	—
l.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	.12½	—
Acetoacetate, dms., c.l., dlvd.	lb.	.58½	—
l.c.l., dlvd	lb.	.58½	—
tanks, dlvd	lb.	.59½	—
Acrylate, dms., c.l., t.l., dlvd.	lb.	.56	—
l.t.l., dlvd	lb.	.36	—
tanks, dlvd	lb.	.37	—
Aminobenzoate, USP (see Benzocaine)	lb.	.34	—
Amyl keytone, dms., c.l., dlvd	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.17½	—
Benzoate, bots	lb.	.74	.90
Bromide, tech., 98%, dms., c.l., frt. alld. E	lb.	.42	.44
l.c.l., frt. alld. E	lb.	.44	.46
Butyl ketone, dms., c.l., works	lb.	.36	—
l.c.l., works	lb.	.36¾	—
tanks, works	lb.	.34	—
Butyrate, works	lb.	.85	.90
Carbamate (see Urethane).			
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works	lb.	.70	—
smaller lots, works	lb.	.72	.80
vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works	lb.	.63	.70
smaller lots, works	lb.	.67	.81
Chloride, tech., cyl., works		.20	.22
dms., works	lb.	.18	.20
tanks, works	lb.	.10	—
Cinnamate, cns	lb.	3.35	3.45
Ether, absolute, ACS, dms	lb.	.27	—
anesthesia, USP, hospitals, 1-lb. cns	lb.	1.01	—
½-lb. cns	lb.	1.11	—
¼-lb. cns	lb.	1.21	—
indust., dms., c.l., dlvd	lb.	.12½	—
l.c.l., dlvd. E	lb.	.13½	—
tanks, dlvd. E	lb.	.10	—
Gallate, dms., 100 to 2,000-lb. lots	lb.	3.90	4.40
Iodide, cbys., works	lb.	3.30	—
Methacrylate, dms., c.l., and less than truckload, works, frt. equaid	lb.	.51½	.52
Morphine hydrochloride, USP, bots.	oz.	11.85	—
Nitrite (see Nitrous ether).			
Oenanthate, dms.	lb.	1.00	1.50
Oleate, dms., l.c.l., works	lb.	No prices.	
Oxalate (see Diethyl oxalate).			
Silicate dist. (see Tetraethyl orthosilicate).			
40% available SiO_2, dms., c.l., dlvd	lb.	.44½	—
l.c.l., dlvd	lb.	.45½	—
tanks, dlvd	lb.	.42	—
Ethylethanolamines, mixed, dms., c.l., dlvd. E	lb.	.43½	—
l.c.l., dlvd E	lb.	.44½	—
tanks, dlvd. E	lb.	.41½	—
N-Ethyl-a-naphthylam'ne, dms., works,	lb.	1.02	—
N-Ethyl-o-toluidide, bbls	lb.	.88	—
Ethylamine (see Mono, Di- or Tri-)			
N-Ethylaniline, dms., c.l., frt. alld.	lb.	.57	—
l.c.l., frt. alld	lb.	.58	—
tanks, frt. alld	lb.	.55	—
Ethylbenzene, 99%, dms., c.l., or t.l., frt. equaid	lb.	.17	—
l.t.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
Ethylene dichloride, dms., c.l., dlvd.	lb.	.11½	—
l.c.l., same basis	lb.	.12½	—
tanks, same basis	lb.	.09	—
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.			
Glycol, indust., dms., c.l., dlvd. E	lb.	.16	—
l.c.l., same basis	lb.	.17	—
tanks, same basis	lb.	.13½	—
Monobutyl ether, dms., c.l., dlvd. E	lb.	.22	—
l.c.l., dlvd E	lb.	.23	—
tanks, dlvd. E	lb.	.19½	—
Monoethyl ether, dms., c.l., dlvd. E	lb.	.21	—
l.c.l., dlvd. E	lb.	.22	—
tanks, dlvd. E	lb.	.18½	—
Acetate, dms., l.c., dlvd E.	lb.	.19½	—
l.c.l., dlvd. E	lb.	.20½	—
tanks, dlvd. E	lb.	.17	—
Monomethyl ether, dms., c.l., dlvd. E	lb.	.21	—
l.c.l., dlvd. E	lb.	.22	—
tanks, dlvd. E	lb.	.18½	—
Acetate, dms., l.c., dlvd. E.	lb.	.29	—
l.c.l., dlvd. E	lb.	.29¾	—
tanks, dlvd. E	lb.	.27	—
Monostearate, triple pressed, dms	lb.	.33	.38
Oxide, dms., c.l., dlvd E	lb.	.21½	—
l.c.l., dlvd. E	lb.	.24½	—
tanks, dlvd. E	lb.	.15½	—
Trichloride (see Trichloroethane).			
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis	lb.	.42	—
l.c.l., dlvd. E., 100% basis	lb.	.43	—
tanks, dlvd. E., 100% basis	lb.	.40	—
Ethylvanillin, cns., 25-lb. lots	lb.	6.20	6.25
Eucalyptol, USP, cns., dms.	lb.	1.25	1.40
Eugenol, USP, bots	lb.	2.23	2.60
Euphorbia herb, bls	lb.	.15	.17

F

Feldspar, 140-200 mesh, bulk, c.l., works	ton	18.50	—
Feldspar in bags $3 per ton higher.			
Fennel seed, Argentine, bgs	lb.	.13½	—
Czech, medium, bgs	lb.	.09	—
Indian, light, bgs	lb.	.15½	—
Roumanian, bgs	lb.	.09	—
Fenugreek seed, Indian, bgs	lb.	.08½	.09
Moroccan, bgs	lb.	.08½	.09
Ferric acetate liquor, 28°, bbls., c.l., works	lb.	.09	—
l.c.l., works	lb.	.09¾	—
soln., USP IX, cbys	lb.	.16	—
djns.	lb.	.17	—

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...in the quantity and quality specified and shipped to meet your operating requirements for gas scrubbing and the absorption of acidic gases.

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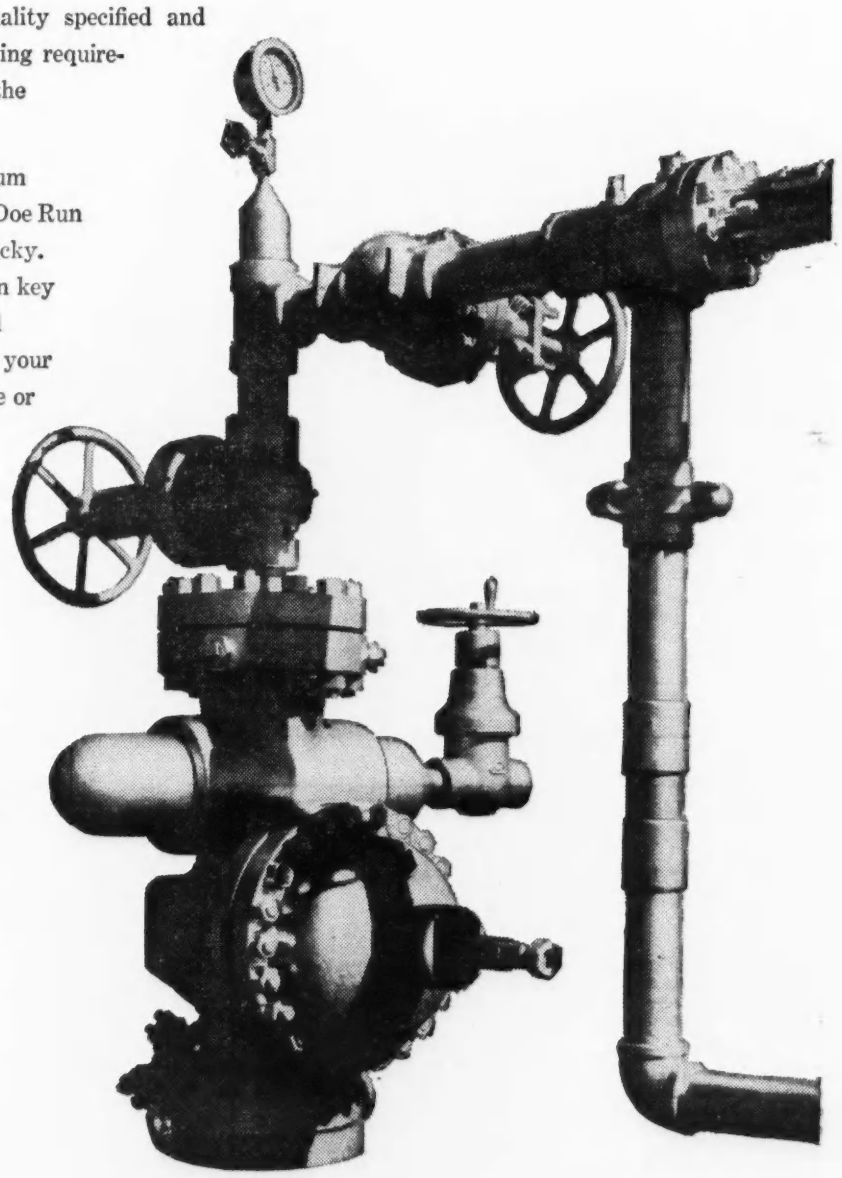
for better gas scrubbing



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OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

4546

MATHIESON

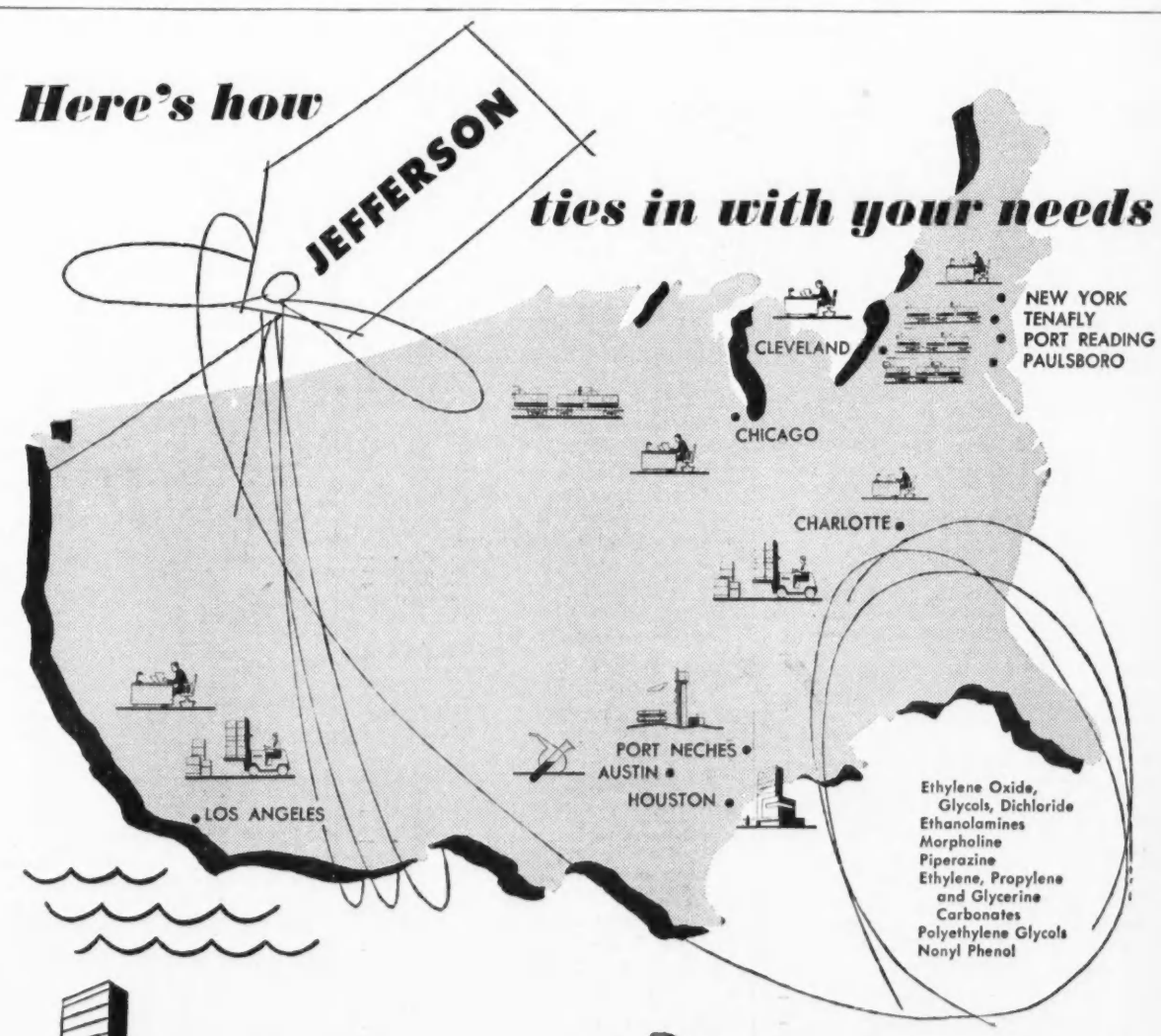
INORGANICS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Potash • Caustic Soda • Chlorine • Hydrazine and Derivatives • Hypochlorite Products • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sulphate of Alumina • Sulphur (Processed) • Sulphuric Acid

ORGANICS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Surfactants

Ferric cacodylate, NF, bots....lb. 13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works....100 lbs. 7.85 - —
indust., cryst., bbls., c.l., works, 100 lbs 5.25 - 6.75
l.c.l., works .....100 lbs. 5.75 - 7.25
42° Be. photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald. 100% basis, 100 lbs. 3.50 - —
USP cryst. dms. works lb .07½- .09
Citrate, gran., dms.....lb. .86 - —
Hypophosphite NF dms lb. 3.45 - —
Naphthenate, liq. 6% Fe, dms., frt. alld lb. .25¾- —
Oxalate gran. dms lb. .85 - .87
Oxides (see oxides under Black, Brown, Red, and Yellow.)
Phosphate NF soluble, gran., pearls cs lb. .64 - .65
Pyrophosphate, NF VII, soluble, powd. gran., pearls, dms., 10,000 lb lots lb. .40½- —
Resinate 6¾% Fe dms., frt alld. lb. .29½- —
Stearate, dms., c.l., frt. alld lb. .39 - —
l.c.l., frt. alld..... lb. .40 - .44
Sulfate partially hydrated, bgs. c.l., works ton.31.75 -33.75
l.c.l. works ton.34.75 -40.75
lb .27 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
green pearls USP XII, gran., dms lb. .66 - .69
Oxalate fine gran., dms lb. .25½- .28½
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28½
Ferrous gluconate, NF, dms lb. .94 - —
Sulfate gran. bgs., c.l. works ton.34.50 - —
l.c.l. dlvd Metropolitan area 100 lbs 3.35 4.25
bbls., c.l. works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP cryst. bbls., dms.... lb .09½- .10
Fir balsam Canada, cns gal.32.00 - —
Oregon, bbls gal. 4.50 - —
Fishliver oil (see Oil fishliver)
Fishmeal, dom., menhaden, 60% protein grd. bgs. Chesapeake Bay area ton.140.00 - —
scrap, same basis ton.136.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, 37% (inhibited, 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0715- —
tanks, dlvd lb. .0450- —
(12 to 15% methanol), USP, dms., c.l., dlvd lb. .0740- —
tanks, dlvd lb. .0473- —
(uninhibited, methanol-free), tanks, dlvd lb. .0420- —
Fringetree bark bls lb .60 .61
Fullers earth bgs. c.l. ill mines, ton.19.00 - —
powd., insecticide grade, dried, bgs. c.l. Ga. or Fla. mines ton.17.50 - —
calcined bgs. c.l., same basis ton.20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh bgs. c.l., same basis ton.17.50 -18.00
spent bgs. c.l. shipt point ton 4.50 5.00
Furfural dms. c.l., works lb. .13 - —
l.c.l. works lb. .14 - —
tanks, dlvd E lb. .12 - —
dlvd W lb. .13 - —
Fusel oil, refd., dms., c.l. dlvd lb. .18 - —
l.c.l. dlvd lb. .19 - —
tanks, dlvd lb. .15½- —
Fustic extract, cryst. No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls. l.c.l lb. .45½- —
No. 3, bbls. l.c.l lb. .43½- —
liq., No. 1, bbls., l.c.l lb. .22½- —
No. 2, bbls. l.c.l lb. .21½- —
No. 3, bbls., l.c.l lb. .19 - —
solid, No. 1, bxs. l.c.l lb. .45 - —

G

G salt, bbls., frt. alld. 100% basis lb. .73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l lb. .53 - —
150 Bloom test, bbl., c.l lb. .64 - —
200 Bloom test, bbls., c.l lb. .70 - —
225 Bloom test, bbls., c.l lb. .73 - —
275 Bloom test, bbl., c.l lb. .81 - —
Gelsemium root, bls lb. .26 - —
Gentian root, bls. lb. .23 - —
grd., bbls., bxs lb. .27 - —
powd., bbls., bxs lb. .27 - —
Geraniol, extra, cns., dms. lb. 3.95 - —
standard, cns., dms. lb. 3.75 - —
Geranyl acetate, cns. lb. 3.95 - —
Ginger oleoresin NF from African root, bots lb 4.00 - 7.75
from Jamaican root, bots lb 6.00 -10.25
Root, African, bls. lb. .33 - —
Cochin, bgs lb. .26½- —
Jamaican, No. 2, bgs lb. .76 - —
No. 3 bgs. lb. .75 - —
Nigerian, split, bgs. lb. .28 - —
Glauber's salt anhyd (see Sodium sulfate)
Glue, bone, extracted, dry bone, 80 jellygrams bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same oasis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
12 green 40 jellygrams, bgs., c.l., dlvd lb. .13½- —
65 jellygrams, same basis lb. .13¾- —
86 jellygrams, same basis lb. .14 - —
115 jellygrams, same basis lb. .14½- —
135 jellygrams, same basis lb. .15 - —
164 jellygrams, same basis lb. .16 - —
180 jellygrams, same basis lb. .17 - —
200 jellygrams, same basis lb. .18½- —
Bone glue l.c.l prices 1c. higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .15 - —
95-121 bgs. c.l. dlvd lb. .16 - —
122-149, bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206, bgs., c.l., dlvd lb. .23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-298, bgs., c.l., dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362 bgs, c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .40 - —
461-494, bgs., c.l., dlvd lb. .42 - —
495-529, bgs., c.l., dlvd lb. .43 - —
Hide glue l.c.l. prices 1c. higher.
l-Glutamine, bots gram .65 - —
Glycerine, nat., crude, saponification, 88%, to refineries, tanks lb. .16½- —
soaplye, 80%, tanks lb. .15 - —
refd., CP, USP 99%, dms., c.l., dlvd lb. .29⅜- —
l.c.l., dlvd lb. .29⅞- —
tanks, dlvd lb. .27⅞- —
Glycerine, refd., CP, USP, 96%, dms., c.l., dlvd lb. .28¼- —
l.c.l., dlvd lb. .29 - —
tanks, dlvd lb. .27 - —
high gravity, dms., c.l., dlvd, lb. .29¼- —
l.c.l., dlvd lb. .29¾- —
tanks, dlvd lb. .27¾- —
yellow, refd., high gravity lb. .28½- —
l.c.l., dlvd. lb. .29 - —
syn., dms., c.l., dlvd lb. 29½- —
l.c.l., dlvd. lb. .30 - —
tanks, dlvd lb. .28 - —
Glycine (see Acid aminoacetic).
Glycerol (see Glycerine),
Glyoxal, 30% dms. c.l., works lb. .18½- —
l.c.l., works lb. .19¼- —
tanks, works lb. .18 - —
Golden seal root, NF tested, bls. lb. 3.50 - —
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 .09½
crystalline 88-90%, powd., bgs., fib dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib, dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib, dms., ex whse lb. .29 .31½
flake, No. 1, 90-95%, bgs., fib, dms., ex whse lb. .29 - .31
No. 2 90-95% bgs., fib, dms., ex whse lb. .29 .31
Grease, white, choice all hog tanks, dlvd lb. .08¼- .08¼
yellow, tanks, dlvd lb. .06¾- .06¾
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb 5.10 - —
tungstated, PTMA kgs., works, lb 6.40 - —
Green, chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N.C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - .42
16-30%, bbls., same basis lb. .40 - .42
31-45%, bbls., same basis lb. .41 - .43
45-49%, bbls., same basis lb. .44 - .46
color, 25% lb. .19 - .20
Chrome green prices are ½c. higher, dlvd at the following points, except as noted:—Ala., Fla., Ga., La (Shreveport 1½c.), Miss N. C., S. C., Tenn., Texas (Dallas, Ft Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Chromium oxide, hydrated, bbls., fib, dms., c.l., frt. alld. lb. 1.20 - —
pure, bgs. c.l., frt. alld lb. 44¾- —
l.c.l. same basis lb. 45½- —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb. 5.30 - —
Paris (see Paris green)
Phthalocyanine toner bbls., works, lb. 3.95 - —
resinated, bbls lb 3.50 - —
water dispersable bbls lb 1.71 - —
Pigment B kegs lb. 1.35 - —
Grindelia robusta herb bls lb .38 .40
Guaiacol NF cryst. dms., tins lb 2.10 2.15
liq., cbys dms lb 2.30 2.40
Carbonate NF VII dms lb 3.40 3.45
Gum, aloe (see Aloe)
Arabic, amber, sorts, bgs lb. .21 - .23
powd., USP, bbls lb. .27 - .29
Asafetida (see A).
Asphaltum (see A)
Benzoin, Sumatra, cs lb. .33 - —
Camphor (see C)
Cellulose, high vis bgs. 23,000-lb lots or more works, frt alld lb .55 - —
smaller lots same basis lb .57 - —
Copal, Congo, No. 1, bgs. lb. 22½- .25
No. 2, bgs. lb. .18½ .20
No. 3, bgs. lb. .15¼ .17
Manila, C, bgs lb. .35½- .39
CBB bgs lb No stocks
DBB, bgs lb. .26 - .28¼
DK, bgs lb No stocks.
dust, bgs lb .14 Nom.
MA, soft, bgs lb. .18½ .21
WS bgs lb No stocks.
Philippine, pale, chips, bgs lb. .21½- .24
nubs, bgs lb .31¾ .34
seeds bgs lb 20 22
sorts, bgs lb 19¾ 22
Pontianak, chips, bgs. lb. 26 —
nubs, bgs lb. .37¾ 40
Dammar, Batavia, A/E cs lb. No stocks.
dust, bgs lb. .16 .18
E, bgs lb. .20 .22



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A fully integrated company with complete facilities strategically located to serve petrochemical users.

RESEARCH LABORATORY
Extensive research facilities are maintained where experienced chemists are constantly seeking new and better petrochemicals.

SALES OFFICES
Our sales and technical service staffs are ready to assist you in developing the most profitable applications of our products.

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Convenient distribution points make stocks readily available in any quantity to assure prompt and dependable service.

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Modern equipment and exacting tests control the manufacture of all chemicals . . . to help improve your products and processes.

BULK TERMINALS
To handle your needs for bulk shipments of quality petrochemicals.

Jefferson
CHEMICAL COMPANY, INC.
Box 303, Houston 1, Texas

Gum, dammar, East India, batu, bold, bgs..lb. .13½- .18
nubs and chips, bgs..lb. .08 - .09
black, bold, bgs..lb. .14 - .16
unscraped, bgs..lb. .11¾- .13
nubs and chips, bgs..lb. .11½- .13
pale, chips, bgs..lb. .12¾- .14
nubs, bgs..lb. .17 - .19
Siam, cs..lb. .36½- .39
Singapore, No. 1, bgs..lb. .44¼- .46
No. 2, bgs..lb. .31¾- .33
No. 3, bgs..lb. No stocks.
dust, bgs..lb. .16 - .18
seeds, bgs..lb 20 - .22
Ester, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid Atl States, N. E States, Minneapolis N. C., Ohio, St Louis, St. Paul, Va., W Va..lb. .14½- .16
Wood-rosin type, dms., c.l., same basis..lb. .15 - .16
Guar, food grade, bgs..lb. .50 - —
tech. grade, bgs..lb. .40 - —
Karaya, No. 1, NF, powd., bbls..lb. .50 - —
No. 2 powd., bbls..lb. .35 - .38
No. 3, powd., bbls..lb. .32 - .35
Locust bean, powd. bgs..lb. .50 - —
Myrrh, cs..lb. .55 - —
Opium (see Opium).
Olibanum siftings, cs..lb. .20 Nom.
tears, cs..lb. .22 .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth, No. 1, ribbons, cs..lb. 4.50 - 4.70
No. 2, cs..lb. 3.50 - 3.75
No. 3, cs..lb. 3.25 - 3.40
powd., USP, bbls..lb. 1.25 - 1.38
Gypsum, plaster of paris, 100-lb. paper bgs., trucks, dlvd, N Y C..ton.20.30 - —
Terra alba, don. paper bgs., same basis..ton.20.00 - —
works, N Y C..ton.17.00 - —
imp., English, 100-lb. paper bgs., ex dock, N. Y. C..ton.55.00 - —
ex warehouse..ton.60.00 -62.00

H

Hawthorn berries, bgs..lb. .21 - —
Heliotropin, 100-lb. lots, dms..lb. 3.00 - 3.25
Hellebore root dom., green bls..lb. .70 - .75
Helonias root, bls..lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., t.c.l..lb. .47 - —
No. 2, bbls., t.c.l..lb. .43 - —
No. 3, bbls., t.c.l..lb. .41 - —
No. 4, bbls., t.c.l..lb. .39 - —
No. 5, bbls., t.c.l..lb. .37 - —
paste, No. 1, bbls., t.c.l..lb. .20½- —
Henbane leaves, bls..lb. .35 - .40
Heptane, indust. tanks, Bayonne, N. J..gal. .19 - —
Baytown, Tex..gal. .14¾- —
Borger, Tex..gal. .14¾- —
Hesperidin, purif., 25 lb. lots, f.o.b., works..lb. 8.95 - —
Methylchalcone, bots., 50-lb. lots, works..lb.22.50 - —
5-lb. lots, works..lb.23.00 - —
1-lb. lots, works..lb.23.50 - —
Hexachlorophene, dms..lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C..lb. .233 - —
1,000-19,999-lb. lots, same basis..lb. .243 - —
smaller lots, same basis..lb. .253 - —
fib dms., 1,000-lb. lots or more, same basis..lb. .250 - —
smaller lots, same basis..lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. N. Y. C. and Philadelphia..lb. .42½- —
smaller lots, same basis..lb. .43½- 48½
Hexane, indust. tanks, Bayonne, N. J..gal. .19 - —
Baytown, Tex..gal. .15½- —
Borger, Tex..gal. .15½- —
1-Hexanol, dms., c.l., works..lb. .35 - —
t.c.l., works..lb. .35¾- —
tanks, works..lb. .33 - —
Hexyl cinnamic aldehyde, dms..lb 4.00 - 7.50
Salicylate, dms..lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd..lb. .17 - —
t.c.l., dlvd..lb. .18 - —
tanks, dlvd..lb. .14½- —
n-Hexyl methacrylate, dms., less than truckload works..lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd..lb.14.00 - —
smaller lots, dlvd..lb.44.50 - —
Homatropine hydrobromide, USP, bots..oz. 5.50 - —
Methylbromide, USP, bots..oz. 3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.25 - —
Horehound herb, bls..lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine free base, 64 dms., works..lb No stocks.
Hydrate, 85%, ret. dms., works..lb 1.35 - 1.55
100%, ret. dms., works..lb. 1.60 - 1.90
Hydrocortisone acetate, bulk, bots., up to 500 gms..gm. 4.75 - —
Alcohol, bulk, bots., up to 500 gms..gm. 4.75 - —
Hydrofuramide, dms., fib ctns., works..lb. .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works..lb. .45 - —
t.c.l., works..lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E..lb. .30½- .32½
dlvd W..lb. .39 - —
tanks, works..lb. .21 - —
Peroxide, USP, bbls., dlvd..lb. .03¾- .05
35%, dms., c.l., dlvd..lb. .202 - —
t.c.l., dlvd..lb. .211 - —
tanks, dlvd..lb. .1800- —
Hydroquinone, photo grade, bbls., dms..lb. 1.03 - 1.06
tech., dms., c.l., dlvd..lb. .82½- —
t.c.l., dlvd..lb. .84½- —
Hydroxycitronellal, cns..lb. 6.00 - 7.45
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots..oz. 6.00 - 7.00
Sulfate, bots..oz. 6.75 - 7.25
Hypernic extract, cryst., No. 2, bbls., t.c.l..lb. .52 - —
liq., No. 1, bbls., t.c.l..lb. .35 - —
No. 2, bbls., t.c.l..lb. .27 - —

I

Ichthammol, NF, jars..lb. .75 - 2.57
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 indigo synthetic).
Indole, CP, bots..lb.16.50 -21.00
Inositol, bots., dlvd..lb. 5.00 - —
dms., dlvd..lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs..lb. 1.10 - —
resub., USP, dms., jars..lb 2.30 - 2.32
Iodochlorohydroxyquinolin, USP, dms..lb. 5.90 - —
Iodoform, NF, dms., kgs..lb 4.90 - 5.00
a-Ionone, cns..lb. 5.25 - 5.40
b-Ionone, cns..lb. 5.40 - 5.70
Ipecac root, bgs., whole..lb. 7.50 - —
powd., bbls., bxs..lb. 7.85 - —
Irish moss, bleached, prime, bls..lb. .28 - .34
Iron compounds (see Ferric or Ferrous). Oxides (see under Black, Brown, Red, and Yellow).
Isoborneol, cns..lb. 1.25 - 1.70
Isobornyl acetate, cns..lb. .46 - .70
Formate, dms..lb. .80 - —
Propionate, dms..lb 1.15 - 1.45
Isobutyl acetate, perfume grade, cns..lb. .75 - 1.00
solvent grade, dms., c.l., dlvd E. of Rockies..lb. .14¾- —
t.c.l., same basis..lb. .15¾- —
tanks, same basis..lb. .12¼- —
Isobutyraldehyde, CP, dms., c.l., dlvd..lb. .27½- —
t.c.l., dlvd..lb. .28½- —
tech., dms., c.l., dlvd..lb. .21½- —
t.c.l., dlvd..lb. .22½- —
tanks, dlvd..lb. .19½- —
Isoeugenol, cns..lb. 3.60 - 4.40
Isoniazid, powd., bulk, 25-kilo lots or more..kilo.23.00 -25.50
smaller lots..kilo.24.00 -26.00
Isopentane, coml. grade, tanks, f.o.b. Tex. refy, gal..15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works..lb. .24½- —
t.c.l., works..lb. .25¼- —
tanks, works..lb. .22½- —
Isopropanol (see Alcohol, Isopropyl).
Isopropyl acetate, dms., c.l., dlvd..lb. .13½- —
t.c.l., same basis..lb. .14½- —
tanks, same basis..lb. .11 - —
Alcohol (see Alcohol, Isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd..lb. .07 - —
t.c.l., dlvd..lb. .08 - —
tanks, dlvd..lb. .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works..lb. .70 - —
t.c.l., works..lb. .714 - .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works..lb. .75 - —
t.c.l., works..lb. .80 - .90
Isoquinoline, dms., works..lb. .65 - 1.25

J

Jalap root, NF, bls..lb. NP - —
powd., bbls., bxs..lb. NP - —
Juniper berries, bgs..lb. .18 - .20
Tar, NF, dms..lb. .42 - .60

K

Kaolin (see also Clay, China).
NF, powd., fib. dms..lb. .10 - .12
colloidal, fib. dms..lb. .15½- .17½
Kola nuts, bgs..lb. .15 - —

L

Lactose, edible, bgs., 23,000-lb. lots, frt. equald..lb. .14 - —
6,000-lb. lots, frt. equald..lb. .14½- —
2,000-lb. lots, frt. equald..lb. .14¾- —
200-lb. lots, frt. equald..lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
fermentation grade, bgs., c.l., frt. equald..lb. .08½- —
USP, fib. dms., 30,000-lb. lots, frt. equald..lb. .21¼- —
2,000-lb. lots, frt. equald..lb. .22¼- —
200-1,800-lb. lots, frt. equald..lb. .22¾- —
USP lactose in bgs., ½c. to 1c. lower.
Ladyslipper root, bls..lb. Nom. —
Lanolin, cosmetic, dms., works..lb. .27 - .29
USP, anhyd., dms., works..lb. .25 - .27
hydrous, dms., works..lb. .24 - .26
Lard, cash, dms., Chicago..lb. .1555- —
Larkspur seed, bgs..lb. .25 - —
Laurel leaves, bls..lb. .12 - —
n-Lauryl methacrylate, dms., c.l. or t.l., works..lb. .65½- —
Lavender flowers, medium, bls..lb. .75 - .80
ord., bls..lb. .25 - .40
select., bls..lb. .90 - —
Lead acetate, white, cryst., bbls..lb. .25½- —
gran., bbls..lb. .26½- —
powd., bbls..lb. .26½- —
NF, cryst., gran., powd..lb. .36½- —
Arsenate, acid, powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more..lb. .27½- —
t.c.l., frt. alld..lb. .28½- —
1-lb. bgs., c.l..lb. .41½- —
t.c.l..lb. .42¼- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld..lb. .17¼- —
t.c.l., same basis..lb. .18¼- —
Carbonate (see Lead, white, basic carbonate).
Chloride, dms..lb. .45 - —
Iodide, NF, V jars..lb. 3.82 - —
Linoleate, fused, 26%% Pb, dms..lb. .33 - —
Metal pigs, prime, N. Y..lb. .16 - —
St. Louis..lb. .1580- —
Monosilicate, bgs., c.l., works, frt. equald..lb. .20 - —
t.c.l., same basis..lb. .2075- —
Naphthenate, liq., 16% Pb., dms., dlvd..lb. .17 - —
24% Pb., dms., dlvd..lb. .21 - —
solid, 37% Pb., dms., dlvd..lb. .27½- —
Nitrate, bbls..lb. .23¾- —
Orthosilicate-silica gel, 50-60% PbO, dms., works..lb. .29¾- .34¼
Peroxide, tech., powd., bbls..lb. .38¾- .40¼
Phthalate, dibasic, dms., works..lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld..lb. .19 - —
t.c.l., same basis..lb. .20 - —
97% Pb_3O_4, bbls., c.l., same basis..lb. .192 - —
t.c.l., same basis..lb. .202 - —
98% Pb_3O_4, bbls., c.l., same basis..lb. .1935- —
t.c.l., same basis..lb. .2035- —
Resinate, precip., 23% Pb, dms., dlvd..lb. .32½- —
Salicylate, normal, dms., works..lb. .46 - —
Silicate (see Lead, white, basic, silicate).
Sulfate (see Lead, blue, basic sulfate, Lead, white, basic sulfate).
Tallate, liq., 16% Pb, dms..lb. .15 - —
24% Pb., dms..lb. .18½- —
solid, 30%..lb. .23¼- —
White, basic carbonate, bgs., c.l., shipt. point, frt. alld..lb. .19 - —
t.c.l., same basis..lb. .20 - —
Lead, white, basic, silicate, bgs., c.l., shipt. point, frt. alld..lb. .17½- —
t.c.l., same basis..lb. .18¼- —
sulfate, bgs., c.l., shipt. point, frt. alld..lb. .17½- —
t.c.l., same basis..lb. .18¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works..lb. .14 - .15
t.c.l., same basis..lb. .16 - .17
unbleached, non-ret. dms., c.l., same basis..lb. .13 - .14
t.c.l., same basis..lb. .15 - .16
Lemon bioflavonoid complex, 25-lb. lots, works..lb. 9.00 - —
dl-Leucine, dms., works..lb 12.25 -15.00
Licorice root, whole, bbls..lb. .10 - .12
gran., bbls..lb. .15 - .17
powd., bbls..lb .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works..lb. .06½- —
t.c.l., works..lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan N Y destination, freight equalized with nearest producing point..ton.20.46 - —
Hydrated, bulk, c.l., same basis..ton.21.96 - —
Spray, bgs., c.l., same basis..ton.25.96 - —
Lime salts (see Calcium).
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works..ton. 3.50 4.00
Linalool, ex bois de rose oil, dms..lb. 3.65 - 4.80
ex lignaloe wood oil, dms..lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms..lb. 3.30 - 5.10
96-98%, dms..lb. 4.05 - 6.75
ex petitgrain, bots..lb. 4.80 - 5.90
Lindane, 25% formulation, dealers, dms., frt. alld..lb. 1.58 - 1.68
99% tech. formulators, dms., frt. alld..lb. 2.65 - 3.25
Linden flowers with leaves, bls..lb. .25 - —
without leaves, bls..lb. .30 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills..ton.59.00 - —
extracted, 36% bulk, same basis..ton.52.50 -53.00
Litharge, coml., powd., bbls., c.l., works, frt. equald..lb. .18 - —
t.c.l., same basis..lb. .19 - —
Lithium benzoate, dms..lb. 1.65 - 1.67
Bromide, NF, dms., works, frt. equald..lb. 2.45 - —
Carbonate, NF, dms., c.l., t.l., dlvd..lb. 1.29½- —
ton lots to t.l., dlvd..lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld., works..lb. .82 - —
t.c.l., same basis..lb. .85 1.11½
Chloride, CP, anhyd., ton lots..lb. 1.23½- —
tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld..lb. 1.00 - 1.05
t.c.l., same basis..lb 1.05 1.05½
Citrate, NF, dms..lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd..lb. 2.17½- —
ton lots, dlvd..lb 2.18½- —
less ton lots, dlvd..lb 2.23½- —
Hydride, powd., dms., 500-lots, works..lb.10.50 -12.50
Hydroxide, monohydrate, dms., c.l., t.l., dlvd. or works, frt. alld..lb. .80 - .80½
t.c.l., same basis..lb. .81 - .81½
Manganite, dms., works..lb. .95 - 1.15
Nitrate, tech., dms., 100-lb. lots..lb. 1.25 - —
Salicylate, dms..lb. 1.60 - 1.70
Silicate, dms., works..lb. 1.10 - 1.30
Stearate, dms., c.l., works..lb. .47½- —
ton lots, works..lb. .48½- —
less-ton lots, works..lb. .53½- —
Sulfate, dms., 100-lb. lots..lb. 1.15 - —
Titanate, dms., works..lb. 1.15 1.35
Lithopone, ord., bgs., c.l., dlvd. E..lb. .08 - —
t.c.l., dlvd. E..lb. .08¾- —
titanated (high-strength), bgs., c.l., dlvd..lb. .10 - —
t.c.l., dlvd..lb. .11 - —
Lobelia herb, bls..lb. 1.50 - —
Lobeline sulfate, bots., works..oz.37.50 -38.50
Logwood extract, cryst., No. 1, bbls., t.c.l..lb. .41 - —
No. 2, bbls., t.c.l..lb. .39 - —
liq., No. 1, bbls., t.c.l..lb. .20 - —
No. 2, bbls., t.c.l..lb. .19 - —
No. 3, bbls., t.c.l..lb. .18½- —
solid No. 1, boxes, c.l..lb. .35 - —
Lycopodium, cs..lb. 3.00 - 3.50
dl-Lysine monohydrochloride, fib. dms..lb.12.00 - —
l-Lysine, fib. dms..lb.12.00 -13.00

M

Mace, Siauw, siftings, bls..lb. 3.25 - —
West Indian, No. 1, bls., shipment..lb. 3.25 - —
Magnesia, calcined, tech., bgs., ctns., works..lb. .25¼- .26
syn. rubber grade, light, bgs., c.l., works..lb. .29¼- —
extra light, bgs., c.l., works..lb. .29¼- .30
t.c.l., works..lb. .30 - —
USP, light, bgs..lb. .35 - .36
heavy, fib. dms..lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald..ton.82.50 - —
dead-burnt, standard grain, bulk, c.l., Chawelah, Wash..ton.40.00 - —
Magnesium bromide, jars..lb. .90 1.00
Carbonate, tech., bgs., c.l., frt. equald..lb. .10½- —
t.l., frt. equald..lb. .11 - —
t.c.l., frt. equald..lb. .12 - .13
USP, bgs., c.l., frt. equald..lb. .12½- —
t.l., frt. equald..lb. .13 - —
t.c.l. frt equald..lb. .14 - .15

Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points

Chloride, anhyd., 92% flake or pebble, dms., c.l., works..lb. .12¾- —
t.c.l., works..lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works..ton.55.00 - —
t.c.l., works..ton.65.00 -80.00
Gluconate, dms., cns..lb. 1.34 - 1.41
Hydroxide, NF, medicinal, bbls., dms., kgs..lb. .26½- .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works..lb. .36 - —
pigs, 10,000-lb. lots or more, works..lb. .35¼- —
sticks, cs., works, frt. alld. on carlots..lb. .59 - —
Oxide (see Magnesia, calcined).
Nitrate, cryst., dms., works..lb. .29 - —
Peroxide, 15%, dms., works..lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls..lb. .75 - —
Silicate (see Talc).
Silicofluoride, dms., works..lb. .10½- .12
Sulfate, tech., bgs., c.l., works, 100 lbs. 2.15 - —
t.c.l., works, 100 lbs. 2.90 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l., 5,000 lbs., 1 withdrawal, 100 lbs. 3.10 - —
smaller lots, 100 lbs. 3.35 - —
Magnesium trisilicate, USP, dms., 5,000-lb. lots..lb. .20 - —
1,000-lb. lots..lb. .21 - —
100-lb. lots..lb. .23 - —

Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.

Malathion, dms., c.l., works..lb. .90 - —
t.c.l., works..lb. .99 - 1.02
Maleic anhydride, dms., c.l., dlvd. E..lb. .28½- —
t.c.l., dlvd. E..lb. .29½- —
tanks, dlvd. E..lb. .27½- —

Prices on maleic anhydride W. of Rockies, 1½c. higher.

Mandrake root, bls..lb. .55 - .60
Manganese acetate, bbls., dlvd..lb. .35 - —
Arsenate, bgs..lb. .16 - —
Borate, tech., fib. dms..lb. .25 - —
Carbonate, bbls., works..lb. .22 - —
Chloride, anhyd., dms., works..lb. .25½- —
Dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works..ton.148.00 - —
paper bgs., works..ton.144.50 - —
dms., works..ton.152.50 - —

Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.

Gluconate, dms..lb. 1.80 - 1.94
Hydrate, bbls., dlvd..lb. .36 - —
Hypophosphite, NF, dms..lb. 3.52 - —
Linoleate, liq., 4.35% Mn, dms..lb. .32½- —
solid, precip., 8.2% Mn, bbls..lb. .37½- —
Naphthenate, liq., 6% Mn., dms., frt. alld..lb. .27 - —
Resinate, fused, 3½% Mn, dms..lb. .24 - —
precip., 6½-7% Mn, dms..lb. .28 - —
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd, S.E..ton.88.55 - —
t.c.l., dlvd, S E..ton.95.55 - —
Tallate, 6% dms..lb. .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock..ton.62.00 - —
So. American, 30% tannin, c.l., ex dock..ton.55.00 -58.00
Mannitol, com'l, fib. dms., ton lots, works..lb. .60 - —
dms., to ton lots, works..lb. .62 - —
single dm., works..lb. .65 - —
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works..lb. .30 - —
t.c.l., works..lb. .31 - —
Menadione, USP, bots..gram .044 .05
Menthol, nat., USP, Brazilian, cs..lb. 6.50 - 7.00
syn., USP, racemic, cns..lb. 4.75 - —
Menthyl salicylate, tins..lb. 4.00 4.25
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld..lb. .42 - —
less ton lots, same basis..lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld..lb. .52 - —
less ton lots, same basis..lb. .54 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more..lb. 4.98 - —
gran. or powd., dms., 50-lb. lots or more..lb. 4.78 - —
Cyanide, NF, VIII, powd., fib. dms..lb. 6.84 - —
Iodide, red, NF, fib. dms..lb. 7.72 - —
Oxide, red, NF, powd., fib. dms..lb. 5.97 6.01
Yellow, tech. (see Yellow mercury oxide), USP, fib. dms..lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF..lb. 7.72 - —
Mercury, ammoniated (see White precipitate USP).
Metal, 76 lb. per flask, net-flask..255.00 -257.00
Mesityl oxide, dms., c.l., dlvd..lb. .14 - .14½
t.c.l., dlvd..lb. .15 - .15½
tanks, dlvd..lb. .11½- .12
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld. gal. .75 - —
syn., Zone 1, dms., c.l., dlvd. or truckload min., frt. alld., gal. .48½- —
t.c.l., works..gal. .55½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area..gal. .35½- —
4,000 gal. min., frt. alld. or dlvd..gal. .32½- —
4,000 gal., min., works, Carteret, Camden, N. J..gal. .30 - —
Zone 2, dms., c.l. or truckload min. frt. alld. or dlvd. gal. .51½- —
t.c.l., works..gal. .58½- —
tankwagon, 2,000-4,000-gal lots, min., dlvd Metropolitan areas..gal. .38½- —
tanks, 4,000 gal., min., frt. alld. or dlvd..gal. .35½- —

Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

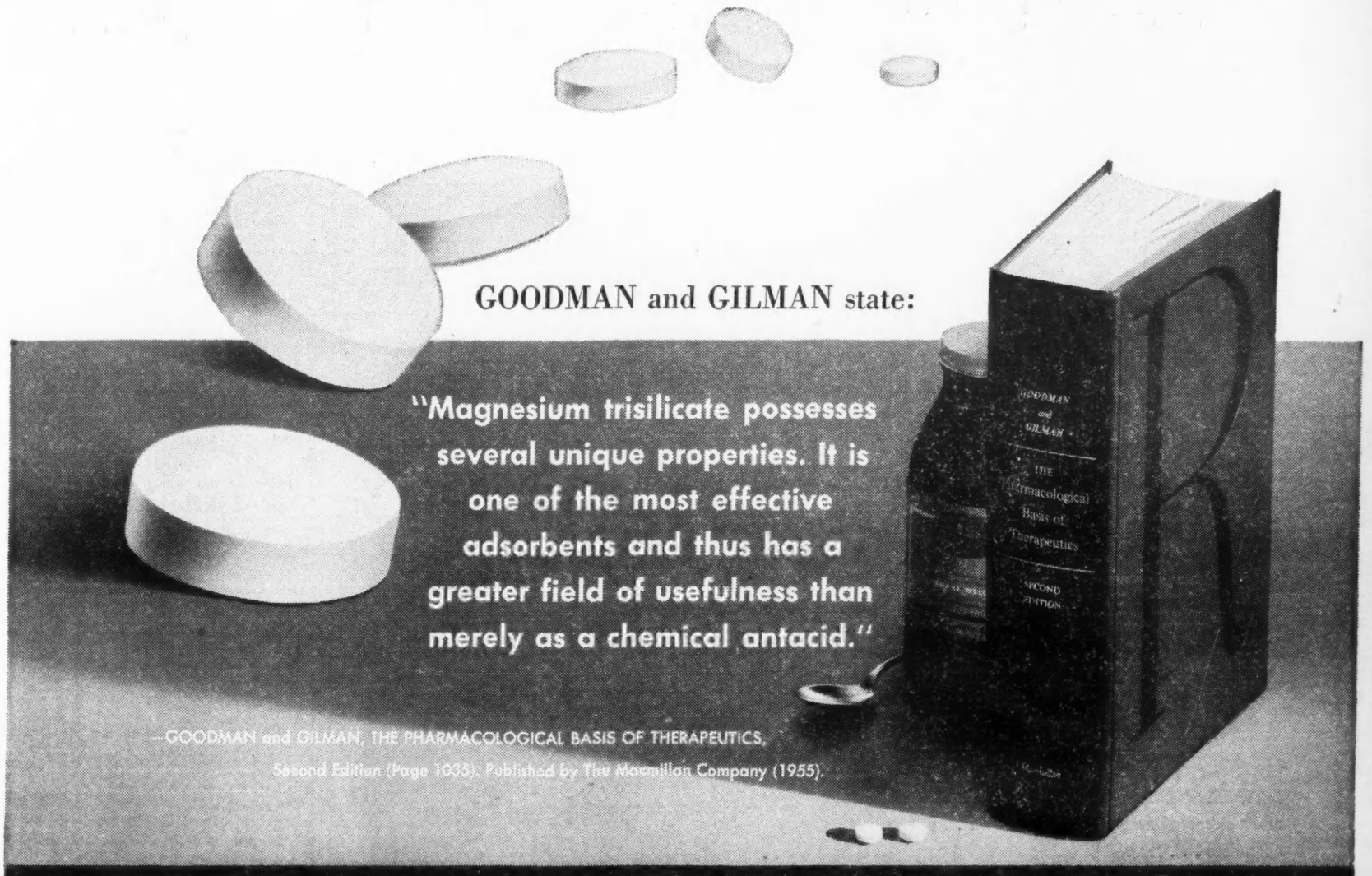
Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more..lb 3.50 - —
feed grade, 88%, fib. dms., same basis..lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers dms., cs., frt. alld..lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1..lb. .20½- —
t.c.l. same basis..lb. .21 - —
hydrogenated, non-ret., dms., c.l., dlvd, Zone 1..lb. .21 - —
t.c.l. same basis..lb 21½- —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Acetone, nat., dms., t.c.l., E. of Miss., frt. alld..gal. .62½- —
Acetone, syn., dms., c.l., frt. alld., E..gal. .63½- —
t.c.l., frt. alld. E..gal. .69½- —
tanks, frt. alld. E..gal. .48½- —

Synthetic methyl acetone E territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Acrylate, dms., c.l., t.l., dlvd..lb. .39 - —
t.t.l., dlvd..lb. .40 - —
tanks, dlvd..lb. .37 - —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E..lb. .16 - —
t.c.l., dlvd. E..lb. .17 - —
tanks, dlvd. E..lb. 13½- —
Ketone, dms., works..lb 1.05 - —
Anthranilate, cns..lb. 2.35 2.65
Benzoate, cns., dms..lb. .60 .75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"Magnesium trisilicate possesses several unique properties. It is one of the most effective adsorbents and thus has a greater field of usefulness than merely as a chemical antacid."
—GOODMAN and GILMAN, THE PHARMACOLOGICAL BASIS OF THERAPEUTICS, Second Edition (Page 1033). Published by The Macmillan Company (1955).
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THE Pharmacological Basis of Therapeutics
SECOND EDITION

Mallinckrodt Magnesium Trisilicate

... MANUFACTURED TO MAKE FORMULATING EASY

Through years of experience in manufacturing magnesium trisilicate, Mallinckrodt has learned to produce a superior product resulting in: (1) controlled bulk, (2) uniform white color, (3) uniform particle size and (4) consistent smoothness (freedom from grittiness).

Mallinckrodt Magnesium Trisilicate USP is an extremely effective antacid and adsorbent. It is inexpensive, tasteless, non-astringent, does not produce alkalosis, and is neither constipating nor laxative in therapeutic doses.

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SPECIFY *Mallinckrodt*

MAGNESIUM TRISILICATE
BISMUTH COMPOUNDS
CALCIUM GLUCONATE
IODIDES
IRON SALTS
MERCURIALS
PHENOBARBITAL

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Methyl bromide, jobbers, cyls., various sizes, frt. alld. E.lb. .47 - .61
Cellulose, special vis (1,500-4,000 ops.), 50 lb bgs, c.l., works lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt. alld. on 100 lbs. lb. .89 - 1.00
standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld lb. .60 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb .75 - .85
Chloride, indust., cyls., frt. equald. lb. .22 - —
tanks, multi-unit, same basis. lb. .15¾ - —
single unit, same basis lb. .12 - —
refrigerator mfrs., cyls., dlvd.lb. .46 - .48
other consumers or service men, cyls., dlvd lb. .67 - —
Chloroform (see 1,1,1,-trichloroethane).
Cinnamate, cns lb. 1.55 - 1.80
Cyclohexanol, dms., c.l., works lb. .35½ - —
l.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Ethyl ketone, dms., c.l., dlvd. lb. .14½ - —
l.c.l., dlvd lb. .15½ - —
tanks, dlvd lb. .12 - —
Formate, refd., dms lb. .35 - .40
tech., non-ret dms., any quantity, works lb. .10 - —

Methyl heptin, carbonate, bots lb.31.00 -42.00
p-Hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Ionone, standard, cns., dms. lb. 5.00 5.25
Isobutyl carbinol, dms., c.l., dlvd. lb. .16½ - —
l.c.l., dlvd lb. .17½ - —
tanks, dlvd lb. .14 - —
ketone, dms., c.l., dlvd lb. .16½ - —
l.c.l., dlvd lb. .17½ - —
tanks, dlvd lb. .14 - —
Methacrylate, dms., c.l., t.l., frt. equald, with Melle, W. Va lb. .31 - —
smaller lots, same basis lb. .31½ - —
tanks, same basis lb. .29 - —
Naphthyl ketone, cryst., cns lb. 3.00 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Roseaniline chloride, NF, fib. dms., 5-lb. dms. lb. 6.54 - —
Salicylate, USP cns., 500-lb lots lb. .59 - —
Testosterone USP 100-gram bots. gram. .68 - —
2-Methylbenzylamine, dms., l.c.l., works lb. 1.25 - —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.39 - —
l.c.l., works lb. 1.90 - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .445 - —
l.c.l., works lb. .45 - —
tanks, works lb. .43 - —
Methylene blue, fib. dms., 100-lb. lots frt. adjusted lb. 3.40 - —

Methylene chloride, tech., dms., c.l., dlvd E. lb. .13¼ - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .11¾ - —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works.lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt alld E lb. .06½ - —
l.c.l., ex-whse lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E lb. .08¼ - —
l.c.l., ex whse or frt. alld. E lb. .09 - —
rubber, bgs. c.l., works, frt. alld. E lb. .08 - —
l.c.l. ex-whse or frt alld. E lb. .08¾ - —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾ - —
l.c.l., ex-whse or frt alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼ - —
l.c.l. ex-whse or frt. alld. E lb. .09 - —
Mica, wet-grd. W of Miss. ½c. higher; W of Rockies, 1c. higher
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .27½ - .28
New York gal. .29 - —
Molybdenum (metal), powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —

Molybdenum trioxide, pure, dms., works lb. 1.15 - —
tech., dms., works, basis Mo. content lb. 1.39 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55½ - —
l.c.l., same basis lb. .56½ - —
tanks, same basis lb. .53 - —
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E lb. .10 - —
l.c.l. same basis lb. .11 - —
tanks, same basis lb. .08½ - —
Monoethanolamine dms., c.l. dlvd. E lb. .27½ - —
l.c.l. same basis lb. .28½ - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine)
Monoethylamine 70% contained amine, dms., c.l. dlvd. E lb. .37½ - —
l.c.l., dlvd E lb. .38½ - —
tanks, dlvd E lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½ - —
l.c.l., same basis lb. .28½ - —
tanks, same basis lb. .25 - —
Monoisopropylamine dms., c.l., dlvd. lb. .32½ - —
l.c.l., same basis lb. .33½ - —
tanks, same basis lb. .30 - —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald 100% basis. lb. .40 - —
l.c.l. frt. equald 100% basis. lb. .40½ - —
tanks, frt. equald 100% basis. lb. .31 - —
40% soln., dms., frt. equald., 100% basis lb. .37 - —
l.c.l., frt. equald. 100% basis. lb. .37½ - —
tanks, frt equald 100% basis. lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic)
Glutamate, dms., c.l. lb. 1.15 - —
l.c.l. lb. 1.23 - 1.27
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol)
Morphine, cns oz.12.40 -12.60
Acetate, anhyd., cns oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 9.95
Hydrochloride, NF cns oz. 9.90 9.95
Sulfate, USP cns oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd E lb. .55¼ - —
l.c.l., dlvd E lb. .56¼ - —
tanks, dlvd E lb. .52¾ - —
Musk, syn. ambrette, 100-lb. lots, fib. dms lb. 4.45 5.15
25-lb. lots, cns lb. 5.05 - 5.65
5-lb. lots, cns lb. 5.20 - 5.50
ketone, 100-lb. lots, fib. dms lb. 4.70 - 5.30
25-lb lots cns lb. 5.35 - —
5-lb. lots, cns lb. 5.45 - —
xylol, 100-lb lots, fib. dms lb. 1.40 - —
25-lb lots, cns lb. 1.45 - —
5-lb. lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb 10¼ - —
Du ch, bgs. lb. .10½ - —
English, yellow, bgs. lb. .11 - —
Montana, oriental, bgs lb. .08½ Nom.
Yellow, bgs lb. .10½ - —
Myrobalans, J-1, genuine, bgs., ex-dock ton.61.00 -62.00
crushed, bgs. ex dock ton.79.00 -80.00
Bombay, bgs., ex dock ton.58.00 -59.00
Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.)
Solvent (see S)
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .06¼ - —
78° bgs., c.l., same basis lb. .07½ - .08
l.c.l., same basis lb. .07¾ - .08¼
tanks, same basis lb. .07 - —
imp., 78° bgs., large lots lb. .05 Nom.
refd., indust., chipped, crushed, bgs., frt. alld. lb. .12½ - —
tanks, same basis lb. .11¾ - —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15½ - —
cs., 50 lbs., c.l., same basis lb. .15¾ - —
1-lb. pkgs., c.l., same basis. lb. .18½ - —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
l.c.l., works lb. .35 - —
a-Naphthylamine, bbls., frt. alld lb .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 5 kilo lots, basis, activity gram. .45 - —
100-999 gram lots, basis, activity. gram. .53 - —
Nerolin, cns lb. 2.45 - 2.65
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .73 - .80
Carbonate, bbls., dlvd lb. .80¾ - .87¾
Chloride, bbls., dlvd lb. .40½ - .48½
Formate, bbls., ton lots, frt. alld lb. .72 - .73
Metal, electro cathodes, cs., works lb. .74 - —
Nitrate, bbls., works lb. .32½ - .33½
Oxide, black, bbls lb. .84 - —
green, bbls lb. .85 - —
Sulfate, bgs., c.l., dlvd lb. .32½ - —
l.c.l., dlvd lb. .33½ - .40½
Nicotinamide, USP, dms., frt. adjusted kilo.12.00 -12.30
Hydrochloride, dms., frt. adjusted kilo.11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld. lb. 1.05 - —
Niger seed, bgs lb. .12 - .12½
Nikethamide, cbys lb. 7.50 - —
m-Nitroaniline, cryst., dms., frt. alld. lb. 1.15 - —
paste, dms., frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld. lb. .49 - —
l.c.l., frt. alld lb. .51 - —
p-Nitroaniline, dms., frt. alld lb. .445 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld lb. .15 - —
tanks, frt. alld lb. .12 - —
Nitrocellulose, ester-soluble, 20-25 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l., same basis. lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis. lb. .41 - —
l.c.l., same basis lb. .43 - .44

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larger production
and higher quality
MAGNESIA COMPOUNDS

for
industrial
and
chemical
applications

NEW PLANT FACILITIES provide industry with more types and volume of magnesia compounds . . . used as fillers, extenders . . . for conditioning, chemical or physical agents . . . and for many other purposes in a wide range of products. Continuing twenty years of high-quality chemical production from superlative Michigan natural brines, Michigan Chemical Corporation can now supply your added requirements for the best in magnesia compounds . . . whether your business is textiles, rubber, chemicals, refractories, insulation, ceramics or fertilizer blending.

TYPICAL ANALYSES OF MICHIGAN MAGNESIA COMPOUNDS

	No. 1 Calcined Magnesite	No. 5 Calcined Magnesite	No. 15 Calcined Magnesite	No. 30C Light Calcined Magnesia	No. 40 Extra Lt. Calcined Magnesia	Basic Magnesium Carbonate	(NF Grade) Magnesium Hydroxide	(Tech. Grade) Magnesium Hydroxide
Bulk density, weight per cubic foot	60 lb.	28 lb.	24 lb.	8½ lb.	5 lb.	5.5 lb.	15 to 25 lb.	app. 20 lb.
Ignition loss:	0.5%	1.5%	2.5%	1.9%	3.0%	56.5%	PASSES N. F. IX SPECIFICATIONS	31.4%
Chloride (as Cl):	0.08	0.1	0.2	0.25	0.25	0.1		
Analysis, ignited basis:						NOT IGNITED		NOT IGNITED
SiO_2	0.3	0.3	0.3	0.3	0.3	0.15		0.20
Fe_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
Al_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
CaO	1.0	1.0	1.0	1.0	1.0	0.7		0.7
Mn				0.01	0.01	0.00		
Free Moisture						1.5		2.0
Screen test: Through 200 mesh		95%		99.9%	99.9%	99.99%	99.0%	99.0%
Screen test: Through 325 mesh			99.5%	99.5%	99.5%	99.5%		

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Write for the Michigan Chemical Catalog containing technical data and specifications on magnesia compounds as well as information on other Michigan Chemical products.

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QUALITY PRODUCER OF PESTMASTER* DDT AND METHYL BROMIDE AND OTHER AGRICULTURAL CHEMICALS

Nitrocellulose, spirit-soluble, 5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
l.c.l. same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms lb. .26 - .27
2-Nitro-4-chlorophenol dms lb. .75 - —
N-Nroethane, dms., c.l., dlvd. E lb .24 - —
l.c.l. dlvd E lb. .24¾- —
tanks, dlvd E lb. .22½- —
Nitroethane prices West of Rockies are 1c higher.
Nitrogen solutions tanks frt. equald. unit. 1.14 - —
Nitrogenous process tankage, bulk, works unit-ton 3.00 4.00
Sewage sludge, bulk, works, unit-ton. 2.95+ .50
Nitromethane, dms., c.l. dlvd. E lb. .24 - —
l.c.l. dlvd E lb .24¾- —
tanks dlvd E lb .22½- —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene bbls. frt. alld. lb. .41 - —
Nitropropane-1 and -2, dms., c.l., dlvd. E lb. .22½- —
l.c.l. dlvd E lb. .23¼- —
tanks dlvd E lb. .21 - —
Nitropropane prices West of Rockies are 1c higher.
o-Nitrophenol dms., works, frt. equald lb. .94 - —
p-Nitrophenol dms., frt. alld., c.l. lb. .51 - —
l.c.l., lb. .53 - —
o-Nitrotoluene dms. c.l. frt. alld lb. .10 - —
l.c.l. frt alld lb. .11 - —
tanks frt alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - —
m-Nitro-p-toluidine dms lb. 1.59 - —
Nitrous ether conc. oots 100-lb. tots lb. 1.28 - 1.35
Nonyl phenol dms. c.l. frt. alld. lb. .26½- —
l.c.l. frt. alld lb. .27½- —
tanks, frt alld lb .24½- —
Nutgalls, Aleppo bgs lb. .36 .38
Chinese bgs lb No prices
Nutmeg, East Indian, bgs lb. 2.80 - —
West Indian, bgs lb. 2.80 - —
Nux vomica bls lb .10 - .12
powd. bbls. bxs lb .15 - .17

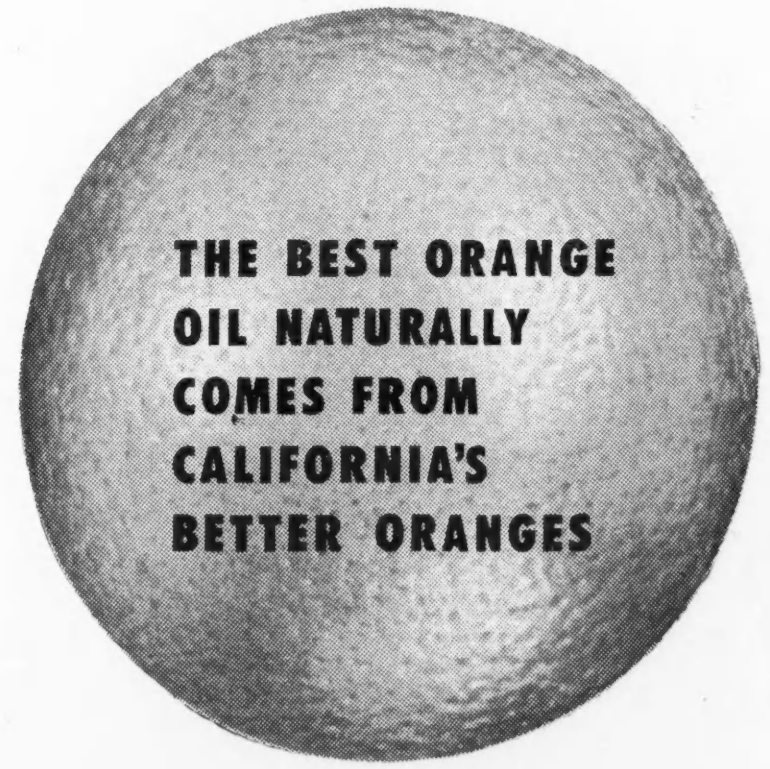
O

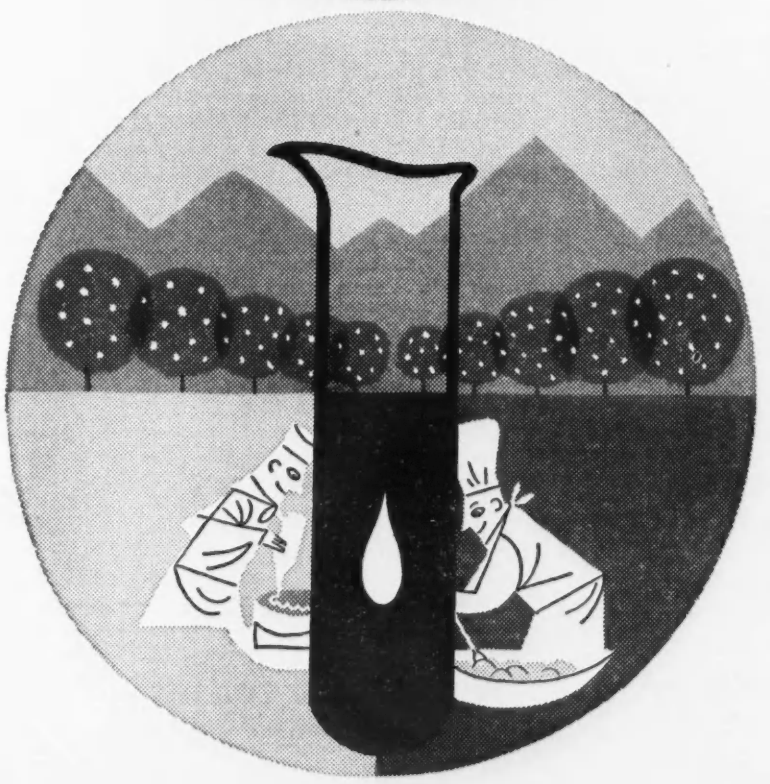
Octane indust. tanks, Bayonne, N. J gal. .19 —
Baytown Tex gal. .15¾- —
Borger Tex gal. .15¾- —
1-Octanol tech dms., c.l., dlvd. lb. .35 - —
l.c.l dlvd lb. .37 - —
tanks dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .24 - —
l.c.l., works lb. .24½- —
tanks, works lb. .23 - —
Drum prices for octyl phenol are 11c higher

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity quality or in individual suppliers. views.)

Oil, abies, siberica, cns lb. 4.00 - —
Almond artif. bitter (see Benzaldehyde)
nat. bitter, F.P.A. bots lb 3.00 3.75
NF bots lb 3.25 3.75
sweet, USP, cns., dms lb. 1.40 - 1.45
Allspice (see Oil, pimento).
Amyris dms lb 1.25 —
Angelica root, bots lb.85.00 -100.00
seed, bots lb.80.00 -95.00
Aniline (see Al)
Anise, USP dms lb 3.50 - 4.00
Apricot, kernel, USP, dms lb. 1.00 - 1.05
Avocado cns lb. 3.25 —
Bay, NF, Puerto Rican, 50-55%, cns lb. 2.15 - 3.00
55-60%, cns lb. 2.50 - 3.00
West Indian 50-55%, cns., dms., lb 1.85 2.40
Bergamot nat. NF Italian, cns lb.10.25 -10.50
Birchtar crude, cns lb 1.50 - 1.90
rectified, cns. lb. 1.75 - —
Bois de rose, Brazil, dms lb. 3.50 - —
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native cns. lb. 1.75 - 3.30
redist USP cns lb 2.25 3.40
Calamus bots lb.12.00 -20.00
Camphor, sassafrassy, dms lb. .28 - .35
white dms lb .29 —
Cananga, native, cns lb. 8.50 - 8.75
rectified, cns lb.10.00 -13.00
Caraway, NF, cns lb. 3.65 - 4.00
Capsicum (see Capsicum oleoresin).
Cardamom NF bots lb.38.00 -40.50
Cassia USP (see Oil cinnamon, USP).
Oil, castor, dom., blown, dms., c.l. lb. .2850- —
l.c.l. lb. .2950- —
dehydrated, bodied, dms., c.l. lb. .3010- —
l.c.l. lb. .3110- —
tanks lb. .2810- —
unbodied, dms., c.l. lb. .2860- —
l.c.l. lb. .2960- —
tanks lb. .2650- —
hydrogenated, bgs., ton lots lb. .3375- —
l.c.l., dlvd lb. .3575- —
No. 1, dms., c.l. lb. .2500- —
l.c.l. lb. .2600- —
tanks lb. .2300- —
No. 3, tech., dms., c.l. lb. .2325- —
l.c.l. lb. .2450- —
tanks lb. .2150- —
USP, dms., c.l. lb. .2650- —
l.c.l. lb. .2750- —
tanks lb. .2450- —
refined, deod., dms., c.l. lb. .2950- —
c.l. lb. .3050- —
imp., No. 1, Brazilian, tanks lb. .22¼- —
Sulfonated 50%, dms., works lb. .15¼- .15½
75%, dms., works lb. .20 - .20½
Cedarleaf USP, XIII, cns., dms. lb. 3.65 - —
Cedarwood, cns., dms lb. .65 - 1.00
Celery seed, bots. lb.15.00 - —
Chamomile blue, Hungarian, bots. lb.225.00 - —
Chenopodium, NF, cns lb. 4.50 - 4.75
Chinawood (see Oil, tung).
Cinnamon bark bots lb.36.00 -70.00
leaf, crude, dms lb. 1.60 2.00
USP cns dms (Cassia) lb 10.25 10.90
Citronella, Ceylon, cns., dms lb. .87 - .90
Java, cns lb 1.95 —
Java-type, cns lb. 1.50 - —
Clove, bud, USP, cns., dms lb. 2.65 - 2.85
leaf crude dms lb 1.20 1.50
Coconut, crude, tanks, N. Y. lb. .12¾- —
Pac. coast lb. .11¼- —
refd Cochin type dms. tax incl., lb. .19¼- .19½
deodorized, tax incl., dms lb. .22¼- .23¼
Cod, Newfoundland, dms lb. .11⅛- .11⅞
Codliver, USP, dms gal. 1.45 - 1.55
Copaiba, cns. lb 1.75 2.50
Coriander, USP, bots. lb.10.50 - —

Oil, corn, crude, tanks, works lb. .13 - —
foots (soapstock), acid 93%, tanks, N. Y. lb. .06¼- —
refd., salad, dms lb. .2066- —
tanks lb. .1866- —
Costus, bots oz. 6.00 - —
Cottonseed, crude, tanks, South, East lb. .14¼- —
Valley lb. .14¼- —
Texas, Lubbock lb. .14¼- —
Waco lb. .14½- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05 - —
refd., salad, dms. lb. .20 - .20½
tanks lb. .18 - —
Creosote (see Creosote, coaltar).
Cubeb, cns lb. 4.10 - 4.25
Cumin, bots., cns lb 4.75 5.00
Cypress, bots lb. 5.30 - —
Degras (see D).
Dillseed, bots lb. 2.80 4.25
Dillweed, dom., bots. dms lb 3.25 4.25
Dip (see D)
Erigeron, cns lb. 5.50 - 7.50
Eucalyptus, NF, rect., 70-80% dms. lb. .62 - —
80-90%, dms lb 72 - —
Fennel, sweet, USP, cns lb. 2.85 - —
Fir, Canada, cns lb. 4.75 - —
Fish, refd., alkali, dms lb. .1450- .1500
kettle-bodied, dms lb. .1680- .1730
light-pressed, dms lb. .1300- .1350
tanks lb. .1150- —
Fishliver, crude for feeds or concentrating 4,000 to 12,000 A units per gram dms., 1,000,000 units. 08 - .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. 09 - .10
25,000 to 35,000 A units per gram, dms. 1,000,000 units. .09 - .10
Oil, fishliver, crude, for feeds or concentrating, 40,000 to 55,000 A units per gram, dms., 1,000,000 units. .10½- .11
100,000 A units per gram., dms 1,000,000 units. 14 - —
200,000 A units per gram., dms 1,000,000 units. .15½- —
500,000 A units per gram., dms 1,000,000 units. .16 - —
Prices above are based on the USP XIV method of conversion. Morton Stubbs Corrected E x 1900
Fusel (see F).
Garlic, pure, bots oz. 4.75 - —
Gaultheria (see Oil, wintergreen)
Geranium, Algerian, cns lb.13.50 -14.50
Bourbon, cns lb.14.25 - —
Turkish (see Oil palmarosa)
Ginger, dist., bots lb.24.00 - —
Grapefruit, dms lb. 1.60 - —
Grease No. 1, dms., c.l lb 15¼- —
l.c.l. lb. .16¼- .18¼
extra, winter, strained dms. c.l. lb. .17¼- —
prime, burning, dms. c.l lb. .18¾- —
l.c.l. lb. .19¾- 21¼
Guaiacwood, cns. lb. 1.60 —
Hemlock, cns lb. 2.10 - 2.30
Juniper berry, bots. lb. 2.75 - 4.00
twice rectified, bots lb 2.75 4.00
Tar, NF (see Juniper tar)
Wood, tech., cns lb .38 .55
Lard (see Oil, grease).
Laurel leaf, dms. cns lb 9.75 12.50
Lavandin, dms., cns lb. 2.55 2.95
Oil, lavender, flower, USP, French, 35-37% ester, cns lb. 7.00 - —
38-40% ester, cns lb 9.25 10.00
40-42% ester cns lb 10.00 14.00
spike, Spanish, cns lb. 2.60 - —
Lemon, USP, Calif., cns., dms lb 4.25 5.00
Messina cns lb 5.75 —
terpeneless bots lb 50.00 85.00
Lemongrass, cns., dms lb. 1.65 —
Lime, dist., Mexican, cns lb. 5.00 - —
West Indian, cns lb. 5.00 - —
expressed West Indian, cns lb 6.00 8.00
terpeneless bots lb 50.00 85.00
Lignaloe wood, Mex., cns lb. 4.65 - 5.00
Linseed, raw, dms., c.l., N. Y. lb. .1680- —
l.c.l. lb. .1780- .1830
tanks, f.o.b. Minneapolis lb. .1350- —
New York lb. .1490- —
tankwagon, New York lb. .1520- .1530
Boiled linseed oil .006c per lb higher
Mace, dist., cns., dms. lb.14.00 - —
Mandarin (see Oil tangerine)
Menhaden crude, tanks, works, Atlantic & Gulf lb. .09¾ Nom.
Mineral white (see Oil white mineral)
Mirbane (see Nitrobenzene)
Mustard seed, nat. dms lb 17½ Nom.
syn., bots lb. 1.60 1.85
Neatsfoot, 15° cold test, dms lb 30 33
20° cold test dms lb 29 32
30° cold test dms lb 28 31
Neroli NF French bots lb 575.00 —
Nutmeg, USP, dist., East Indian, cns., dms lb.15.00 - —
West Indian, cns., dms lb.14.50 - —





OIL OF ORANGE, U.S.P.

Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

Exchange

Sunkist Growers
Products Department • Ontario, California

Distributed in the U.S. and Canada by
Dodge & Olcott, Inc., 180 Varick St.
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New York 11, N.Y.
Ungerer & Company, Inc.
161 Avenue of the Americas
New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

Oil, ocotea cybarum, dms ..... lb. .50 - .60
Oiticica, liq., dms ..... lb. .17¼- .17½
tanks ..... lb. .15¾- .16
Oleo, extra, dms ..... lb. .19½ Nom.
Olibanum, bots ..... lb 5.50 7.65
extra fine bots lb 8.00 9.00
Olive, edible, Spanish, dms., duty-paid gal. 3.50 - 3.60
Orange, sweet, dist., ens., dms lb. .45 - .80
expressed, USP, Brazilian, ens., dms lb. No stocks.
Calif., ens., dms ..... lb. .60 1.75
Florida, ens, dms ..... lb .50 - .60
Messina, ens ..... lb 3.85 - 5.85
West Indian, ens., dms. lb 2.50 - 3.65
sesquiterpeneless bots lb 65.00 120.00
Origanum Spanish, ens lb 2.00
Palm, clarif., dms ..... lb. .15½- .16½
Palmarosa, ens lb 8.25 9.00
Paraffin, pale, 100-110 vis., at 100°F, tanks, East Coast refy gal .14 —
Patchouli, dms ..... lb. 6.00 - —
Peach kernel, USP (see Oil apricot kernel)
Peanut, crude tanks f.o.b mills lb. .15½- —
refd., dms. ..... lb. .20¾- .21
tanks ..... lb. .18¾- —
Pennyroyal USP imported, ens lb 2.75 3.50
Peppermint, nat., dms ..... lb 4.75 6.50
redist., USP, dms ..... lb. 5.25 - 6.75
Persic, USP (see Oil, apricot kernel)
Petitgrain South American, ens. dms. 3.00 - —
Pimento, berry, NF, dms .. lb 2.05 2.60
leaf, ens. ..... lb 2.05 2.60

Oil, pine, dest.-dist., dms., l.c.l., works lb. .12¼- —
ex whse lb 14¼ —
steam-dist., dms., ex whse, N.Y.C lb. .176 - —
dlvd. ..... lb. .179 - —
Pineneedle Siberian (see Oil, abies siberica)
Rapeseed, tankcars ..... lb. .18¾- —
Red (see Acid, oleic).
Rice bran, clarif., dms., l.c.l lb. .18 Nom
tanks, dlvd. E ..... lb 15 - .15½
Rose, nat., Bulgarian, bots ..... oz. 70.00 - —
Rosemary, Spanish, NF, ens., dms. lb. .70 - 1.00
tech., ens., dms ..... lb 50 70
Rue, bots ..... lb 2.00 2.50
Safflower, dms., N. Y. ..... lb. .1785- .1835
tanks, same basis ..... lb. .1585- —
Sage, clary bots ..... lb 18.75 19.00
Dalmatian, ens ..... lb 4.30 - —
Spanish, ens. ..... lb 1.20 1.45
Sandalwood, ens. ..... lb. 15.50 - —
Sardine crude tanks, Pac coast, lb .08½ .08¾
Sassafras, artif., dms ..... lb. .50 - .62
nat., dom., dms. ..... lb. 1.45 - 2.10
imp., Brazilian (see Oil, ocotea cymbarum).
Savin, ens ..... lb 2.75 - —
Savory, ens ..... lb 4.25 - —
Sesame, USP, dms ..... lb. .38 - .39
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works ..... gal. .44 - —
tanks, works ..... gal. .23 - —
Snakeroot, Canada, ens. ..... lb. No stocks.

Oil, soybean, crude, tanks, Decatur, lb. .14¼- —
foots soapstock, acid 95% tanks, N. Y. lb. .06¾- —
refd., alkali, dms. ..... lb. .1891- .1900
tanks ..... lb. .1691- —
clarified, dms. ..... lb. .1841- .1850
tanks ..... lb. .1641- —
salad, dms. ..... lb. .1921- .1950
tanks ..... lb. .1721- —
Spearmint, dms. ..... lb. 4.40 - —
Sperm, bleached winter, 45°, dms. lb. .1675- .1725
tanks ..... lb. .1500- —
nat. winter, 45°, dms ..... lb. .1575- .1625
tanks ..... lb. .1400- —
Spruce, ens., dms ..... lb. 2.10 - 2.75
Sweet birch, USP, Northern, ens. lb. 4.25 9.50
Southern, ens ..... lb. 2.30 2.75
Tall, crude, dms., c.l., works ..... lb. .04¼- —
tanks, works ..... lb. .03 - —
dist., dms., c.l., works ..... lb. .07½- —
l.c.l. works ..... lb. .07¾- —
tanks, works ..... lb. .06 - .06¼
refd., dms., c.l., works ..... lb. .06½- .06¾
l.c.l. works ..... lb. .06¾- .07¾
tanks, works ..... lb. .05¼- .05¾
Tallow, acidless, dms., c.l. ..... lb. .13½- —
l.c.l. ..... lb. .14½- .16
Tangerine, Floridian, dms .... lb. 2.00 - 3.80
Tansy, dms ..... lb. 7.50 - 8.40
Tar acid (see T's).
Pine, comm., dms., c.l., works lb. .0561- —
l.c.l., works ..... lb. .0634- —
whse ..... lb. .0745- —
tanks works ..... lb. .046 - —
rectified, NF, dms., incl., l.c.l., works, South gal 1.05 - —
ex whse, N. Y. C gal. 1.15 - —
refd., dms., incl., l.c.l., works, gal. .92 - —
ex-whse, N.Y.C. ..... gal. 1.02 - —

Oil, theobromine (see Cocoa butter).
Thyme, NF, red., ens., dms ... lb. 1.45 - 1.75
white, ens. ..... lb 1.70 2.00
tech., white, ens ..... lb 40 1.85
Tung, dms., c.l., N. Y. ..... lb. .23½- —
l.c.l., same basis ..... lb. .23¾- .24
tanks, N. Y. ..... lb. .22 - —
domestic mills ..... lb. .23 Nom.
Turpentine, NF ens., dms. .. lb 28 45
Veviter, Bourbon, ens ..... lb. 11.75 -11.90
Haitian, ens. ..... lb. 9.25 -10.00
Java ens ..... lb. 18.50 -20.00
Wheat germ, 5-gal. dms ..... gal. 11.25 - —
Turkey red (see Oil, castor, sulfonated).
White mineral, tech., 50-65 vis., non-ret. dms c.l., t.o.b. N. Y gal. .55 - —
65-75 vis., non-ret., dms. c.l., same basis gal. .56 - —
l.c.l., same basis gal. .61 - —
80-90 vis., non-ret., dms., c.l., same basis gal. .57 - —
l.c.l., same basis gal. .62 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .63 - —
l.c.l., same basis gal. .68 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .69½- —
l.c.l., same basis gal. .74½- —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .71 - —
l.c.l., same basis gal. .76 - —
200-210 vs., non-ret. dms., c.l., same basis gal. .75 - —
l.c.l., same basis gal. .79 - —
345-355 vis. non-ret. dms., c.l., same basis gal. .78½- —
l.c.l., same basis gal. .84½- —
Wintergreen, USP, nat., Northern, ens lb. 6.35 -10.30
Southern ens lb 3.20 19.50
syn (see Methyl salicylate)
Wood (see Oil, tung).
Wormseed (see Oil, chenopolium, NF).
Wormwood, ens ..... lb. 5.50 - 6.85
Ylang-ylang, Bourbon, bots ..... lb. 14.00 -16.00
extra, bots ..... lb. 28.00 -40.00
Madagascar, bots ..... lb. No stocks
Oleostearine, dms ..... lb. .14½- .15
Opium, USP, ens ..... oz. 19.20 -19.45
gran., USP, ens ..... oz. 21.65 -21.90
powd USP ens ..... oz. 21.65 -21.90
Orange cadmium-selenide lithopone, light shade, bbls., frt. alld E. of Rockies lb. 1.80 - —
deep shade, bbls lb. 2.00 - —
Cadmium-mercury lithopone, deep shade, bbls lb. 1.78 - —
Chrome CP, bbls., dlvd. N of Tennessee and N.C., E. of Miss. R., include Davenport, Tenn., and E of Minneapolis, Rock Island, St. Louis, St. Paul. lb. .35 - —
Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C. S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago
Dinitroaniline toner, CP ..... lb. 1.50 - —
Mineral, American, bbls., l.c.l., works lb. 2235- —
Molybdated, bbls ..... lb. .48 - —
o-Nitroaniline toner, kegs ..... lb. 1.35 - —
Orange peel, bitter, Haitian, bls lb. .14 - .16
sweet, bls lb. .16 - .18
Orris root, Florentine, bls ..... lb. .55 - —
powd., bbls., bxs ..... lb .68 - —
Verona, bls. ..... lb .35 - .40
powd., bbls., bxs ..... lb .45 - —
Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine)
Orthochloroanilin (see o-Chloroaniline)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitrobiphenyl (see o-Nitrobiphenyl)
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol)
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage orange, cryst., No. 1, bbls. l.c.l. lb. .40 - —
extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain USP bots ..... gram. 3.00 - 4.00
Oxyquinolin sulfate, ens., 100-lb. lots, works lb. 4.75 5.00
smaller lots, works ..... lb. 4.92 - 5.17

P

Papain, USP, African, bots ..... lb. 3.50 - 4.00
Ceylon ..... lb. 3.00 - 3.50
Papaverine, nat. or syn. hydrochloride USP, ens., 25-oz. to 100-oz. lots oz. 5.00 —
smaller lots ..... oz. 5.05 5.20
Sulfate ens. ..... oz. 7.10 7.35
Paprika, Roumanian, bgs ..... lb 26 —
Spanish, bgs ..... lb. .60 - —
Yugoslavian, bgs ..... lb. .35 - —
Para-aminophenol (see p-Aminophenol)
Para-anisidin (see p-Anisidine)
Parachloro-ortnonitroanilin (see 4-Chloro-2 nitroaniline)
Parachloranilin (see p-Chloraniline)
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude, scale, white, 123°-127°F, ASTM, tanks, refy. lb. .0710- —
fully refd., 122°-124°F, ASTM, tanks, refy lb. .0815- —
125°-127°F, ASTM, tanks, refy lb. .0815- —
130°-132°F, ASTM, tanks, refy lb. .0815- —
132°-134°F, ASTM, tanks, refy lb. .0815- —
135°-137°F, ASTM, tanks, refy. lb. .0815- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld lb. .11¼- —
l.c.l., frt. alld ..... lb. .13¼- .14¼
powd., bgs., c.l., ex whse ... lb. .167 - —
l.c.l., ex whse ..... lb. .182 - —
USP, X, fib dms., c.l. ..... lb. .19 - —
1,000-lb. lots ..... lb. .20 - —
smaller lots ..... lb. .21½- —

HIGHEST QUALITY LEMON OIL BEARS THE *PRODUCER'S* LABEL!

- Pure, unadulterated lemon oil . . . cold-pressed in California . . . and *packed by the producer* . . . has long provided the accepted standard for top quality and flavor.
- M.C.P. LEMON OIL is just such a product. Prepared for many years for distribution by others, M.C.P. LEMON OIL is now packed *under this experienced producer's own label.*
- Furthermore, all lemon oil packed under the M.C.P. label is *exclusively first grade lemon oil* . . . thus assuring the user receiving a product that is *unsurpassed* for flavor, purity, and highest quality.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

W. J. BUSH & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

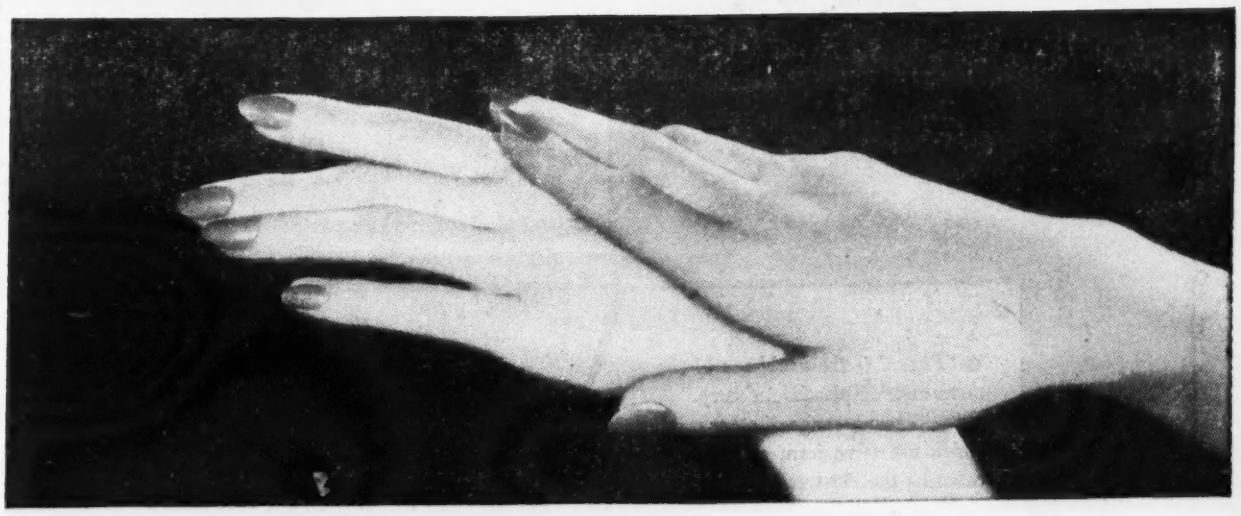
Paraldehyde, tech., 95%, 55-gal. dms., c.l., works lb. .14 • —
l.c.l., works lb. .15 • —
tanks, works lb. .11½• —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15%, dealers, bgs., dms., frt. alld. lb. .50 • .53
tech., dms., c.l., t.l., works lb. 1.3395 • —
l.c.l., works lb. 1.51 • —
Paratoluenesulpnonamide (see p-Toluenesulfonamide).
Paris green, dealer, dms., c.l., frt. alld lb. .44 • .47
l.c.l., same basis lb. .45 • .48
Passion flower herb, bls. lb. .25 • —
Peanut meal, 45%, old process, bgs., mills ton.51.50 • —
Pectin, citrus, NF, powd., bbls lb. 2.05 • 2.06
tech., powd., bbls. lb. 1.23 • —
imported, Danish, ex whse lb. 1.28 • —
Penicillin, crystalline, potassium, bulk 1,000,000 units. .0675- .0700
Procaine, bulk 1,000,000 units. .0675- .0700
Sodium, bulk 1,000,000 units. .0775- .0800
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .22 • —
l.c.l., same basis lb. .23½- .30
Pentaerythritol, tech., bgs., c.l., works lb. .32 • —
l.c.l., works lb. .33 • —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks., Tex. refy. gal. .13 • —
Pepper, black, Malabar, spot, bgs. lb. .28½- —
red, Gondar, spot, bgs. lb. No prices.
Japanese, hontaka bgs. lb. .34 • —
Singapore, bgs., new crop lb. No prices.
Mombasa, bgs., shipt lb. .56 • .57
Nigerian, bgs lb. .42 • —
Turkish, bgs. lb. .28 • —
white, bgs lb. .35 • .36
Peppermint leaves, USP, dom., bls., dms lb. .70 • .75
imp., bls lb. .85 • —
Perchloroethylene, dms., c.l., or truckloads, dlvd lb. .13 • —
l.c.l., dlvd. lb. .14½- —
tanktruck, 1,000 gal., min. dlvd lb. .12 • —
tanks dlvd. lb. .11½- —
Peru balsam, dms lb. 1.35 • —
Petrolatum, extra amber, dms., c.l., refy. lb. .06½• —
l.c.l., dlvd lb. .08¼• —
tanks, refy. lb. .04¼• —
cream, dms., c.l., refy lb. .07½• —
l.c.l., dlvd. lb. .09¾• —
tanks, refy. lb. .05¼• —
USP, white, lily, dms., c.l., refy. lb. .07⅞• —
l.c.l., dlvd lb. .10⅛• —
tanks, refy lb. .05⅝• —
snow, dms., c.l., refy lb. .08⅝• —
l.c.l., dlvd lb. .10⅝• —
tanks, refy lb. .06¼• —
yellow, soft, dms., c.l., refy lb. .06½• —
l.c.l., dlvd lb. .08¼• —
tanks, refy lb. .04¼• —
Petroleum, lacquer diuuent, 150°-240°F. b.r., tanks, West Coast, ex tax, Los Angeles. gal. .174 • —
East coast, N. J., N. Y. gal. .20 • —
Mineral spirits, reg. tanks, Calif., ex tax San Francisco gal. .169 • —
East coast, N.J., N.Y. gal. .18 • —
tankwagon, Boston gal. .20 • —
Buffalo gal. .20½• —
Chicago gal. .289 • —
Cleveland gal. .23½• —
Newark gal. .19 • —
New York gal. .19 • —
Philadelphia gal. .19½• —
Pittsburgh gal. .20½• —
odorless, tanks, refy., Watson, cal. gal. .25 • —
Borger, Tex gal. .25 • —
Houston, Tex gal. .25 • —
Wood River, Ill gal. .2725- —
N. J., dlvd gal. .33 • —
N. Y., dlvd gal. .34½• —
tankwagon, N. J., dlvd gal. .37½• —
N. Y., dlvd gal. .38½• —
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y. gal. .18 • —
tankwagon, Newark gal. .19 • —
New York gal. .19 • —
Philadelphia gal. .19½• —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F., b.r., tanks, West Coast, Los Angeles gal. .174 • —
Portland, Ore. gal. .18 • —
San Francisco gal. .179 • —
Seattle, Wash gal. .18 • —
East Coast, N. J., and N. Y. gal. .19 • —
tankwagon Boston gal. .21½• —
gal. .21½• —
Chicago gal. .299 • —
Cleveland gal. .24½• —
Newark gal. .20½• —
New York gal. .20½• —
Philadelphia gal. .21 • —
Pittsburgh gal. .20 • —
Solvent, partial aromatic, tanks, 205°-262°F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 • —
212°-278°F b.r. 43°C m.a.p., N. J gal. .26 • —
212°-284°F b.r. 19°C. m.a.p., N. J gal. .29 • —
224°-280°F., b.r., 48°C. m.p.a., Houston gal. .215 • —
273°-361°F., b.r., 29°C., m.a.p., N. J gal. .29 • —
282°-325°F b.r., 41.5°C. m.a.p. Houston gal. .25 • —
287°-386°F., b.r. 31°C. m.a.p., N. J. gal. .29 • —
310°-314°F., b.r., 13.5°C., m.a.p., Texas City gal. .32 • —
310°-348° b.r., 17°C., m.a.p., N. Y., N. J gal. .35 • —
320°-360°F., b.r., 16°C., m.a.p., N. Y., N. J gal. .33 • —
324°-349°F., 37°C., m.a.p., Houston gal. .32 • —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 • —
352°-413°F., b.r., 30°C., m.a.p., Houston gal. .33 • —
358°-401°F., b.r., 25°C., m.a.p., N. Y., N. J. gal. .39 • —
364°-404°F b.r., 19°C. m.a.p., N. Y., N. J gal. .425 • —
367°-418°F b.r., 19.6°C. m.a.p., N. Y. N. J gal. .33 • —
Rubber, tanks, Cal., ex tax, San Francisco gal. .178 • —
East Coast, N. J., N. Y. gal. .19 • —

Petroleum solvent, stoddard, tanks, East Coast, N. J., N. Y. gal. .18 • —
Pennsylvania, western gal. .16 • —
tankwagon, Boston gal. .20 • —
Chicago gal. .299 • —
Cleveland gal. .23½• —
Los Angeles, ex tax gal. .199 • —
Newark gal. .19 • —
New York gal. .19 • —
Philadelphia gal. .19½• —
Pittsburgh gal. .19 • —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 • —
l.c.l., works lb. .17 • —
tanks, works lb. .13 • —
o-Phenetidine, dms., t.l., frt. alld. E lb. .91 • —
l.c.l., same basis lb. .93 • —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.00 • —
l.c.l., same basis lb. 1.03 • —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.23 • —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.23 • —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt. alld E. of Rockies lb. .17¾- .18
l.c.l., same basis lb. .18¼- .19
tanks, same basis lb. .16 • —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
l.c.l., same basis lb. .18½- —
tanks, same basis lb. .15½- —

Phenol, 39°C. or above, tar distilled, non-ret. dms., c.l., same basis lb. .19¼- .19½
l.c.l same basis lb. .19¾- .20½
tanks, same basis lb. .17½- —
USP, syn., dms. c.l., t.l., frt. alld lb. .20 • —
l.c.l., same basis lb. .22 • —
tanks, same basis lb. .18 • —
Phenolphthalein, USP or yellow, bbls. dms. 2,000-lb lots. lb. 1.15 • —
smaller lots lb. 1.17 • 1.22
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb. .39 • —
over 2,100 lbs. same basis lb. .41 • —
less than 2,100 lbs. same basis. lb. .43 • —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 • —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb 2.40 2.70
100%, bots lb 4.00 4.65
dl-Phenylalanine, dms., works lb. 27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, 200-lb. fib. dms., dlvd. E lb. 3.45 • —
smaller dms., dlvd. E lb. 3.80 • —
N-Phenyldiethanolamine dms., c.l., dlvd. E lb. 40½- —
l.c.l. dlvd E lb. 41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine dms. frt alld. lb. .93 • —
o-Phenylenediamine, comL, 100 to 1,000 lbs., fib. dms., works lb 1.70 • 1.80

p-Phenylenediamine, refd., tech., dms., works lb 1.42 • —
Phenylethanolamine, d m s., c.l., works lb 75½- —
l.c.l., same basis lb 76 • —
Phenylethyl acetate, bots lb 1.25 1.60
Phenylhydrazine base, CP bots lb 3.00 3.07
Hydrochloride comL kgs., works lb 1.75 • —
purif., bots., works lb 5.17 • —
1-Phenyl-3-methyl pyrazolone-5 250-lb lots, dlvd E lb 1.80 • —
smaller lots, dllvd. E lb. 2.10 • —
Phenylethylphenyl acetate, bots lb 4.15 4.35
o-Phenylphenol, dms. l.c.l. works lb 42 .44
p-Phenylphenol, bgs., c.l., works lb. .37 • —
l.c.l., works lb. .41½• —
Phloroglucinol, comL, fib. dms., works lb 6.40 • —
C.P., bots. works lb.17.75 • —
tech., fib drums., works lb.10.45 • —
Phosphate defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton.48.00 • —
Florida, land pebble, run-of-mine, washed dried unground, bulk, c.l., mines, 68-66% b.p.l. bulk, c.l., mines long-ton. 5.115 • —
70-68%, b.p.l. c.l., same basis long-ton. 5.515 • —
72-70%, b.p.l., c.l., same basis long-ton. 6.165 • —
75-74%, b.p.l., c.l., same basis long-ton. 7.165 • —

The **SHINE** of auto **LACQUER**



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The many popular hues of automobile lacquers and the bright beauty of milady's nail polish depend upon high-quality active solvents for their outstanding durability and appearance. Enjay Ketones and Solvents meet the most exacting requirements of the surface coating industry—for lacquers and enamels, paint, varnish and enamel removers.

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KETONES AND SOLVENTS (Methyl Ethyl Ketone, Acetone, Isopropyl Acetate, Secondary Butyl Acetate); and a varied line of LOWER ALCOHOLS, HIGHER OXO ALCOHOLS, OLEFINS AND DIOLEFINS AND AROMATICS.

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ENJAY COMPANY, INC., 15 WEST 51st ST., NEW YORK 19, N. Y. Other Offices: Akron, Boston, Chicago, Los Angeles, Tulsa

Phosphate rock, Florida land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 77-76%, b.p.l.long-ton. 8.165 - —

The Florida prices (above) are based on fuel oil at $2.82 per bbl. and labor at $1.43. Recent oil advance currently absorbed.

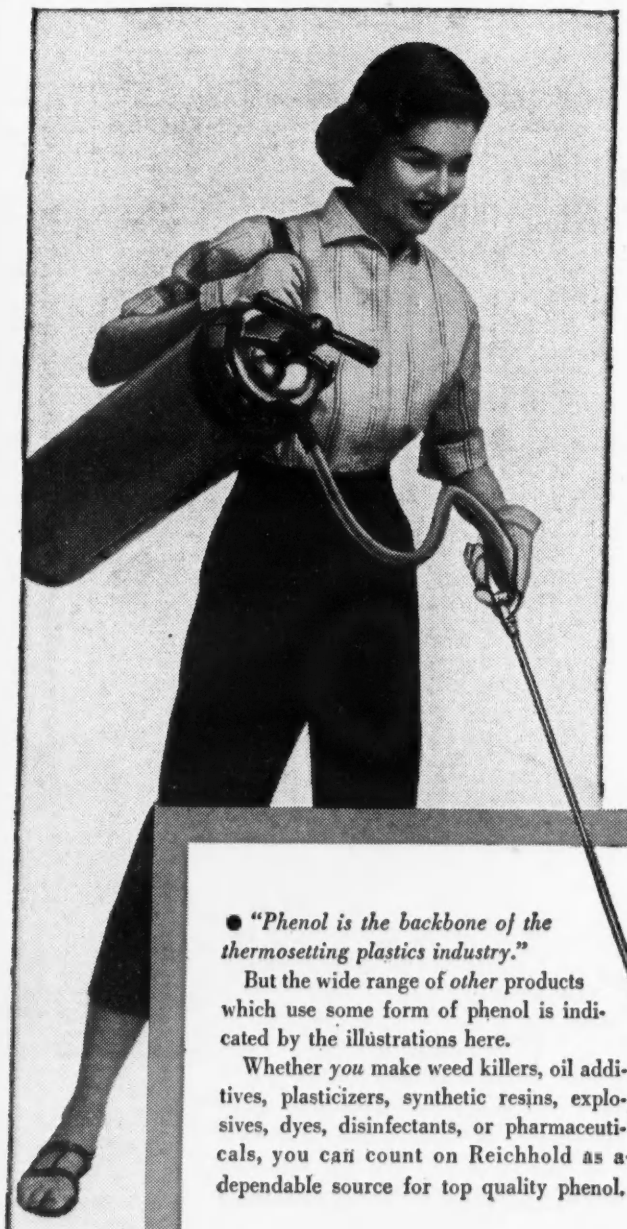
Phosphorus amorph. red dms., t.l., works lb. .48 - —
smaller lots, works lb. .49 - .50
white (yellow), solid, dms., c.l., works,, frt. equald lb. .20 - .20½
t.c.l. works frt equald. lb. .21½- —
tanks works, frt. equald. lb .19 —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks works lb 12½- —
Pentasulfide, solid, dms., c.l., works lb. .11½- —
t.c.l. works lb. 12½ —
Pentoxide, dms., c.l., works lb. .1395- .1450
l.c.l., works lb. .1695- .1750
Sesquisulfide, tins, cs., c.l., works. lb. .38 —
t.c.l., works lb. .39 - .40
Trichloride, dms., c.l., works lb. .14 - —
t.c.l. works lb. .15 —
tankcars. works lb. 12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½- —

Phthalimide, 97%-98%, dms., frt. equald lb. .65 - —
Phthalylsulfacetamide, 1,000-lb lots or more lb 5.00 - —
NF lb. 5.20 - —
a-Picoline, ret. dms., c.l., works, frt. equald lb. .43 .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline 5°C. dms., c.l., works. lb. .32½- —
t.c.l. works lb 33 —
g-Picoline 98% dms., works lb. 2.00 —
Pilocarpine hydrochlorue, USP bots oz 4.75 5.25
Nitrate USP bots, vials oz 4.65 4.75
Pimento, Jamaican, bgs lb 72 —
Mexican, bgs lb. .36 - —
Pink root, bls lb 2.50 - —
Piperazine, crude, dms., c.l., works. lb. 3.00 - —
l.c.l., works lb. 3.05 - —
Hexahydrate, French Codex, bots. kilo. 8.00 - 8.50
Piperidine dist., dms. frt. equald lb 2.60 2.70
Piperonyl butoxide dms divd E lb 4.50 5.05
Cyclonene, dms., divd. E lb. 3.70 - 4.25
Pitch, coaltar, bulk, aluminum, works ton.40.00 -42.00
carbon and industrial, works. ton.40.00 - —
core, works ton.36.50 - —
fiber, works ton.44.00 - —
roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton.39.00 - —

Pitch, cottonseed, raw, dms., works, lb. .03 - .03¼
tanks, same basis lb. .02¾- —
Linseed, dms lb. .06 - .06¾
Marine, dms lb. .04¼- .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works lb. .05 - .05½
Tall, dms., c.l., works ton.50.00 -70.00
tanks, works ton.30.00 -40.00
Plaster of Paris (see Gypsum).
Platinum metal, works oz.98.00 -101.00
Pleurisy root, bls lb. .45 .50
Podophyllum resin, NF, dms lb.15.60 -16.10
root bls lb. .19 .22
Polymyxin, bulk, bots., dms., 50 billion units or more. 1,000,000 units. .52 - —
25-50 billion units..1,000,000 units. .54 - —
1-25 billion units..1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
Tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
Poppy seed, Argentine, bgs lb. .24 - —
Dutch, bgs lb. .28 - —
Iranian bgs lb. .14½- .15
Polish, bgs lb. .27½- —
Turkish, bgs lb. .24 - —
Potash caustic reg., flake, 88-92%, dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs.10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —

Potash, caustic, solid, 88-92%, dms., c.l., works..100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF dms lb. .31 .36
Bicarbonate, USP gran., dms lb. .22 —
powd. dms lb. .24 —
Bichromate, gran., bgs., c.l., t.l., works lb. .18 —
l.c.l., works lb. .18½- .19¼
Potassium bichromate in dms. ¾c. higher.
Bitartrate, NF, dom., gran. or powd., bbls. 5,000 lbs., l ship't lb. .40½- —
dms., c.l lb. .40 - —
smaller lots lb. .41 - .43
imp., kgs lb. .32 - .35
Bromate dms. 1,000 lbs. or more. lb. .50 —
25-200-lb to lb. .52 .62
Bromide, USP, gran., bbls., kgs. lb. .37 - .38
Carbonate, NF, gran., bbls., dms. lb. .20 - —
powd. bbls. dms lb. .21 - .22
tech., calcined, bbls., c.l., works. 100 lbs. 9.00 - —
t.c.l. same basis 100 lbs.10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
t.c.l., works 100 lbs. 8.65 —
Chlorate cryst. dms. c.l. works. lb. .11¼- —
l.c.l., works lb. .11½- .12½
powd., dms., c.l., works lb. .11¾- —
l.c.l., works lb. .12 - .13
NF, gran., 25-lb. metal dms lb. .36 - —
Chloride, agricultural (see Potassium muriate).
Indust 99.9% KCl bulk, c.l., works ton.29.00 - —
bgs., c.l., works ton.33.50 - —
99.3% KCl bulk c.l., works ton.27.00 - —
bgs., c.l., works ton.31.50 - —
USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd. dms lb. .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP, gran., dms lb. .43 - —
powd., dms lb. .40½- .41½
Cyanide dms. 20,000-lb. lots or more works lb. .45 - —
2,000-19,999-lb lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate)
Ferricyanide, dms., ton lots, works. lb. .50 - —
smaller lots, works lb. .65 - —
Ferrocyanide, bgs., ton lots lb. .23 - —
smaller lots lb. .23½- —
Fluoborate 6h dms. c.l., works lb. .30 - —
t.c.l. works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms lb. 1.62 - —
Guaiacolsulfonate, NF, dms lb. 2.10 2.30
Hydroxide, tech. (see Potash caustic).
USP pellets 100-lb. dms. 1 to 100-dm. lots lb. .33½- .38
Hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Iodide, dms lb 1.90 - 1.95
Manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765
Metabisulfite, gran. dms lb. .20 - .21
powd., dms lb. .25 - —
Muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price, unit-ton. .36 - —
July forward unit-ton. .38 - —
granular, 60-63% K_2O, bgs., c.l., works, base price ton.26.25 - —
July forward ton.27.45 - —
Nitrate, NF, cryst., bbls., 20-ton lots...100 lbs.16.50 - —
smaller lots 100 lbs.17 50 -18.00
gran., bgs., 20-ton lots..100 lbs. 9.25 - —
smaller lots 100 lbs.10.50 -11.00
powd., bgs., 20-ton lots..100 lbs.10.25 - —
smaller lots 100 lbs.11.50 -12.00
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .31
Pentaborate, gran., bgs., c.l., works. ton.191.50 - —
dms., ton lots, ex whse..ton.302.00 - —
smaller lots, ex whse...ton.307.00 - —
Powdered potassium pentaborate $10.25 per ton higher
Perchlorate, dms., c.l., works lb. .18½- —
l.c.l., works lb. .19 - .20
Permanganate, coml., kgs., works. lb. .28 - .29
USP, dms., works lb. .29¼- .31
Persulfate, bbls., c.l., works lb. .16½- —
dms., 5-ton lots, works lb. .18 - —
1-ton lots, works lb. .20 - —
Pyrophosphate, tetrabasic, dms., works lb. .15½- .18¼
Prussiate red (see Potassium Ferrocyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass bgs., c.l., works. 100 lbs.17.00 -17.30
l.c.l., works 100 lbs.17.80 - —
soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms. or more works 100-lbs. 6.55 - 6.95
tanks, works 100-lbs. 5.45 - —
electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more works 100 lbs. 7.20 - 7.60
tanks, works 100 lbs. 6.10 - —
Silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb higher
Stannate, dms., frt. alld. E lb. .789 - .861
Sulfate, agricultural, 50% K_2O, bulk, works, base price, unit-ton. .64 - —
July forward unit-ton. .67 - —
NF VII, cryst., dms lb. .31 - .33
gran., dms lb. .18½- —
powd., dms lb. .16 - .17
Sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms lb. .84 - .94
tech., works lb. .77 - .79
Titanate, ctns., c.l., works lb. .14 - —
5-ton lots, works lb. .14½- —
1-ton lot or less, works lb. .14¾- —
Toluene sulfonate, dms., c.l., or t.l., works lb. .42 - —
l.c.l., works lb. .46 - —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO, base price ton.13.45 - —
July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. powd., dms., c.l. lb. .42½- —
5,000-lb. lots lb. .43 - —
smaller lots lb. .43½- .49
Potassium-titanium fluoride, fib. dms, works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 - —
l.c.l., works lb. .52½- .55
Pregnenolone, bots. gram. .45 - —
Acetate, bots. gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.83 - —
100-500-lb. lots lb. 2.95 - 3.15

Weed killers?



Oil additives?

What's your need for top quality Phenol?

● *"Phenol is the backbone of the thermosetting plastics industry."*

But the wide range of *other* products which use some form of phenol is indicated by the illustrations here.

Whether *you* make weed killers, oil additives, plasticizers, synthetic resins, explosives, dyes, disinfectants, or pharmaceuticals, you can count on Reichhold as a dependable source for top quality phenol.

With RCI PHENOL you can be sure of quality control because *Reichhold not only sells its phenol but uses it.* RCI produces phenolic resins for everything from high pressure laminates to plywood glues.

RCI can deliver phenol to you fast in any part of the country—in drums or tank cars, whichever suits your storage facilities. Next time you need phenol, in any quantity, get in touch with Reichhold.

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RCI

REICHHOLD

Synthetic Resins • Chemical Colors • Industrial Adhesives • Plasticizers
Phenol • Formaldehyde • Glycerine • Phthalic Anhydride
Maleic Anhydride • Sodium Sulfite • Pentaerythritol • Pentachlorophenol
REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N. Y.

Progesterone, USP, bots., 100 gram lots	gram	.50	-	—
Acetate, bots.	gram	70	-	—
Propane, indust., tanks, group 3	gal.	.05	-	—
N. Y. Harbor	gal.	.093	-	—
n-Propyl acetate, dms., c.l., dlvd.	lb.	.14¼	-	—
t.c.l., dlvd.	lb.	.15¼	-	—
tanks, dlvd.	lb.	.11¾	-	—
Gallate, dms., 500 to 2,000-lb. lots, works	lb	3.90		4.40
p-Hydroxybenzoate, USP, dms	lb	2.30		2.40
Propyl thiouracil, bots., 50-kilo lots or more	kilo.	55.00		—
smaller lots	kilo.	55.10		55.30
Propylene dichloride, dms., c.l., dlvd. E	lb.	.09½	-	—
t.c.l., same basis	lb.	.10½	-	—
tanks, same basis	lb	07		—
Propylene dichloride prices in West 1c higher dlvd. on same basis.				
Glycol, indust., dms., c.l., dlvd. E	lb.	.16	-	—
t.c.l. same basis	lb.	.17	-	—
tanks, same basis	lb	.13½		—
USP, dms., c.l., dlvd. E	lb.	.18	-	—
t.c.l., same basis	lb.	.19	-	—
tanks, same basis	lb	15½		—
Methyl ether dms., c.l., dlvd	lb.	.20	-	—
t.c.l. same basis	lb	.21		—
tanks, same basis	lb	.18½		—
Oxide, dms., c.l., dlvd. E	lb.	.18	-	—
t.c.l., dlvd. E	lb.	.19	-	—
tanks, dlvd. E	lb.	.16½	-	—
Psyllium seed, black, bgs	lb.	.28	-	.30
blonde, bgs	lb	18		—
husks, bgs	lb	40		—
Pumice, dom., grd., coarse to fine, 0 ½ 1 1½ 2 3 bgs., ton lots	lb.	03⅜		.04¼
smaller lots	lb	037⅛		04½
imp., Italian, silk-screen, coarse, bgs., ton lots	lb	05½	-	—
fine, bgs ton lots	lb	04		—
sun dried, coarse, bgs	ton	58.00		—
fine, bgs	ton.	No Prices		
Pumpkin seed, bgs	lb	25		.26
Pyrethrin, syn (see Allethrin)				
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works	lb.	45		—
powd., 1.3% pyrethrins, obls., works	lb.	.65		—
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works	gal.	8.75	-	8.85
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works	gal.	41.75		42.75
oleoresin dewaxed 20% dms., works	lb.	10.00		—
purif. 20% dms., works	lb.	10.00		10.10
Pyridine denaturing, dms., c.l., works and frt equald	gal	2.77	-	—
t.c.l., same basis	gal.	2.80	-	—
refd. 2° non-ret dms., t.c.l., same basis	lb.	.75	-	—
Pyridoxine hydrochloride, bots., 100-gram lots	gram.	.37½	-	—
Pyrites, Canadian, works long-ton		3.00		5.00
Pyrocatechol (see Catechol)				
Pyrogallol, NF, 100 lb. dms.	lb.	3.50	-	—
Pyroxylin scrap, ungrd., amber, dms., works	lb.	.20	-	—
black, dms., works	lb.	.12	-	—
mixed mottled c/ms., works.	lb.	.13		—
shavings, amber, cs., works.	lb.	No stocks.		
mixed colors, dms., works	lb.	.11		—
white, china, ivory, dms., works	lb.	.16	-	—
dense opaque dms., works.	lb.	.12	-	.15
translucent pastels, cs., works.	lb.	.14	-	—
colors, dms., works	lb.	.16	-	—
USP bots	lb	9.50		—

Q

Quassia chips	lb.	.17	-	—
Quebracho extract, clarif., grd., 70% tannin bgs. c.l.,	lb.	.16½	-	.16¾
liq. 35% tannin bbls. works.	lb.	.08¼	-	08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra.	lb.	.12 23 64		
ord. 63% tannin bgs., c.l., same basis	lb.	11 21 32	-	—
Quercitron extract, cryst., No. 1, bbls., t.c.l.	lb.	.40	-	—
liq. No. 1, bbls. t.c.l.	lb.	.19	-	—
Quicksilver (see Mercury metal)				
Quince seed, bgs	lb.	2.00		Nom.
Quinidine sulfate USP cns., 100-oz. lots	oz.	.73	-	.78
Quinine, NF, cns., 100-oz. lots	oz.	.54	-	—
Bisulfate USP, cns., 100-oz lots.	oz.	.37½	-	—
Hydrochloride, cns., 100-oz. lots.	oz.	.35	-	.47½
Sulfate, USP, cns., 100-oz. lots	oz.	.29	-	.33
Quinoline dms. c.l., frt equald	lb.	.50¾	-	—
t.c.l., same basis	lb.	.51¼	-	—
tanks, same basis	lb.	.50	-	—

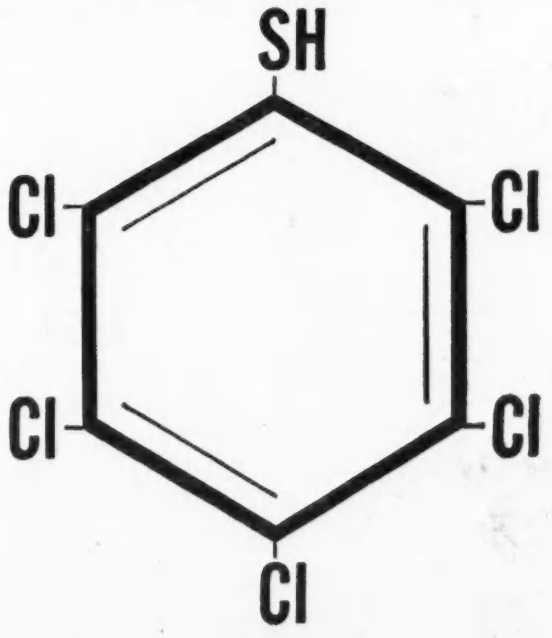
R

R salt, paste, dms., frt. alld. 100% basis	lb	.88	-	—
powd., frt. alld. 100% basis	lb.	.98	-	—
Rauwolfia serpentina root, powd., bbls., dms	lb.	1.75	-	—
resinated, bbls	lb	1.50	-	—
Red, BON acid maroons, pure, bbls.,	lb.	1.75	-	—
arylid, deep shades, bbls.	lb.	3.70	-	—
light shades, bbls.	lb.	2.85	-	—
maroon, bbls.	lb.	3.70	-	—
Cadmium CP, dark shade, bbls., frt. alld. E. of Rockies	lb.	4.30	-	—
light shade bbls. same basis.	lb.	4.00	-	—
medium shade bbls., same basis	lb.	4.25	-	—
medium light shade, bbls., same basis	lb.	4.05	-	—
orange shade, bbls., same basis	lb.	3.95	-	—
orange red bbls. same basis.	lb.	1.81	-	—
Selenide lithopone, maroon shade, bbls., same basis.	lb.	3.77	-	—
dark, bbls., same basis.	lb.	3.90	-	—
red shade, dark, bbls., same basis	lb.	3.44	-	—
light, bbls., same basis.	lb	2.24	-	2.32
medium, bbls., same basis.	lb.	2.99	-	—
medium light, bbls., same basis	lb.	2.49	-	—
Mercury lithopone, dark shade, bbls., same basis	lb.	2.40	-	—
light shade, bbls., same basis.	lb.	1.93	-	—
medium shade, bbls., same basis	lb.	2.23	-	—
medium light shade, bbls., same basis	lb.	2.10	-	—
Carmine, No. 40 (see Carmine).				
Dyes (see Dyes, coaltar).				
Eosin toner, bbls., works	lb.	1.75	-	—
Red, Indian, dom., pure, bgs., Bethlehem Easton & St. Louis, N. Y.	lb.	.12¾	-	—
Iron oxide, nat., 75-85% ferric oxide bgs. t.c.l., Bethlehem Pa., Copley, O., Easton, Pa., bgs., c.l., works	lb.	.0675	-	—
Lake C toner, alizarine, bbls., works	lb.	1.20	-	—
Lithol toner, bbls., works	lb.	.93	-	—
rubine toner pure bbls. works.	lb	1.50	-	—
resinated, bbls. works	lb	1.40	-	—
Virginia type bbls., works	lb	1.40	-	—
Maroon toner, MNPT, kgs., c.l., works	lb.	3.80	-	—
Mercury oxide, tech. c.l., works.	lb.	5.77	-	—
Metallic, bbls., c.l., works	lb	02½	-	—
t.c.l., works	lb	02¾	-	—
Naphthol, ITR, bbls., works	lb.	5.50	-	—
Oxide (see Red iron oxide)				
Persian Gulf bgs. c.l., works.	lb	07¾	-	—
t.c.l. works	lb	08	-	—
Para toner, bbls	lb.	1.15	-	—
chlorinated, kgs.	lb.	1.30	-	—
Phloxin toner (see Red eosin toner)				
Rhodamine, molybdated, PMA, kegs	lb.	5.80	-	—
tungstated, PTMA works kegs	lb.	6.60	-	—
Spanish oxide, bbls., c.l., ex-dock.	lb.	.05¾	-	—
t.c.l. ex dock	lb	06	-	—
ex whse., New York	lb	06½	-	—
Toluidine toner, deep shades, kgs., works	lb.	1.70	-	—
light shades, kgs. works	lb.	1.70	-	—
Turkey, bbls., works	lb.	.62	-	—
Tuscan, bbls., frt. equald	lb	.26		.32
Red, Venetian, jobbing, bgs., works.	lb.	.0475	-	—
20%, bgs., works	lb.	.0525	-	—
25%, bgs., works	lb.	.0573	-	—
30%, bgs., works	lb.	.06	-	—
35%, bgs., works	lb.	.0625	-	—
40%, bgs., works	lb	.0673	-	—
Watchung-type, bbls	cwt.	1.95		—
Red KB base (see 4-Chloro-2-aminotoluene).				
Red, precipitate (see Mercuric oxide, red)				
Red saunders NF powd. bbls	lb	.33	-	.40
Reserpine, cryst., bots	gram.	3.00	-	—
Resorcinol, tech. grade, dms., c.l., works, frt equald	lb	77½	-	—
t.c.l. same basis	lb	78½	-	—
USP, dms., works	lb	2.75	-	—
powd., dms., works	lb	2.95	-	—
Monoacetate NF dms	lb	3.00		3.25
Rhatany root bgs	lb	15		.16
Rhodinol 5-lb cans	lb.	32.00		36.00
Rhubarb root, India, whole, bgs.	lb.	.30	-	—
powd., bbls	lb	.38	-	—
Riboflavin USP, bots., dlvd	kilo.	65.00	-	—
readily soluble, bots. dlvd	kilo.	130.00	-	—
5' phosphate-sodium, bots., 100-kilo lots or more	kilo.	125.00	-	—
Rochelle salt (see Potassium-sodium tartrate).				
Roofing pitch (see Pitch, coaltar, roofing)				
Rosin gum and wood (see Naval Stores in Protective Coatings market)				
Rotenone, fib. dms., works, unit-lb.		.12	-	—
resin 25-45% fib dms. works, unit-lb.		.12	-	—
Rottenstone, bgs. 5-ton lots, ex-whse	lb.	.03¾	-	—
ton lots, same basis	lb.	.04¼	-	—
Rutin, NF, fib. dms., 10 kilo lots.	kilo.	17.00	-	—
5 kilo lots	kilo.	17.50	-	—
1 kilo	kilo.	18.50	-	—
Ryania, 100% powd. bgs., c.l., works	lb	.22		—
t.c.l. same basis	lb	.24	-	—

S

Sabadilla seed powd., bbls	lb.	49		49¼
activated ground with lime, bbls.	lb	.30		.32
Saccharin USP cryst. soluble, dms., 1600-lb lots	lb	1.60		—
smaller lots	lb	1.70		1.80
powd., soluble, insoluble, dms., 1,000-lb. lots	lb.	1.63	-	—
smaller lots	lb	1.75		1.95
Calcium fib dms 1,000-lb. lots, works	lb	2.50		—
Saffron Spanish USP tins	lb	45.00		—
Safrol, dms	lb	.90		1.05
Sage, Cretan bgs	lb	11		—
Dalmatian bgs	lb	44		—
Italian	lb	26		Nom.
Sago flour, raw bgs	lb	07		07¼
refd. bgs	lb	08½		09
Sal soda (see Soda sal).				

A promising new **Du Pont Development Chemical** for your consideration



Pentachlorobenzenethiol* can help you as an intermediate for herbicides, fungicides and pharmaceuticals

A combination of the reactive thiol group and chlorine in one molecule makes Du Pont Pentachlorobenzenethiol a potentially useful intermediate for a number of important products—particularly in the agricultural chemical and pharmaceutical fields.

REACTIONS: Pentachlorobenzenethiol reacts as a typical aromatic thiol with: 1. alkali and alkaline earth hydroxides to form water-soluble metallic salts; 2. various oxidizing agents such as hydrogen peroxide, potassium ferricyanide and sulfur dichloride to form mono, di and polysulfides; 3. acid chlorides or anhydrides to form thiol esters; 4. carbonyl compounds to form thioacetals and thioketals; 5. isocyanates to form thiol urethanes.

JUST DROP US A LINE and we'll gladly send our product information on pentachlorobenzenethiol—now available in development quantities. We'll also be glad to send a test sample for your development work if you request it. E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Department, Chemicals Division, Wilmington 98, Delaware.

Technical Grade

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BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

ORGANIC CHEMICALS DEPARTMENT

Salicylamide—Sodium, Metallic Bricks

Salicylamide, 100-lb. dms ..... lb. 1.25 - —
Salol, NF, grnn., bbls., kgs lb 1.15 - —
Powdered salol 25c higher
Salt, rock, paper bgs., c.l. 100 lbs. 1.04 - —
table vacuum common fine,
paper bgs., c.l. 100 lbs. 1.29 - —
Saltcake dom. bulk works, 100% Na2SO4 basis ton 28 00 —
Saltpeter (see Potassium nitrate).
Sandalwood East Indies chips bgs. .65 .66
powd. fib dms lb 75 76
Schaeffer's salt paste, dms., frt. alld 100% basis lb 95 —
powd. bgs. frt alld 100% basis lb 95 —
Scopolamine hydrobromide USP bots oz. 13.50 - 16.50
Seidlitz mixture, bbls. 5,000-lb. lots lb. 30½ —
smaller lots lb 31 .32
Selenium, powd., 99½% dms., dlvd. lb. 12.00 - —
Senega root, bls ..... lb. 2.75 - —
Senna leaves, Alex., whole and half, bls lb. .19 - —
siftings ..... lb. .17 - —
Tinnevelly, No. 1, bls ..... lb. .16 - .18
No. 2, bls. ..... lb. .13 - .15
No. 3, bls ..... lb. .11 - .13
powdered, bbls., bxs..... lb. .15 - —
pods, bls. ..... lb .14 - —
Serpentaria, root, bls ..... lb 5.50 - —

Sesame seed, Egyptian, hulled, bgs. lb. .22½- —
nat., bgs. ..... lb. .17 - —
Nicaragua, hulled, shipt., bgs. lb. .25 - —
nat., bgs lb. 16½- —
Salvadorian, natural, bgs .... lb. .21½- —
Indian, natural, bgs. ..... lb. N.P.
Shellac, bleached, bonedry, bgs., 2,500-lb. lots lb. .52 - —
bbls., 1,500-lb. lots ..... lb. .53 - —
kgs., 1,500-lb. lots ..... lb. .54 - —
refd., bgs., 1,500-lb. lots ..... lb. .62 - —
bbls., 1,500-lb. lots ..... lb. .63 - —
kgs., 1,500-lb. lots ..... lb. .64 - —
Bonedry shellac prices for less than 1,500 lb lots 1c. per lb higher for all packages
Lemon, No. 1, bgs., 10-bg. lots lb. .41 - .42
No. 2, bgs., 10-bg. lots ..... lb. .40 - .41
Superfine, bgs., 10-bg. lots ..... lb. .38 - .39
Shellac in 1 to 10-bg lots 1c per lb more.
Shingle stain oil (see Oil shingle stain)
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton 25 00 —
t.c.l. works, exwhse ton 45 00 55 00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton 20.00 —
t.c.l., works ton 25 00 30.00
140 mesh, bgs., c.l., works ton 15 00 —
t.c.l., works ton 20 00 —
Silicon tetrachloride, tech., dms., c.l., works lb. 18 —
t.c.l. works lb 22 .30½
tanks, works ..... lb 17 —

Silver bullion, ingots, cs. ... Troy oz. .91⅜- —
Cyanide fib dms., 2,500-oz. lots, oz. .87 - —
1,000-oz. lots ..... oz. .87⅜- —
500-oz. lots ..... oz. .87½- —
100-oz. lots ..... oz. .87¾- —
Nitrate, CP, cryst., bots., 2,500-oz. lots oz. .62⅜- —
1,000-oz. lots ..... oz. .63½- —
500-oz. lots ..... oz. .64⅛- —
250-oz. lots ..... oz. .64⅜- —
USP granular silver nitrate 4c. per oz higher.
Proteinate, mild USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
strong NF bots. dms. 1,000-oz. lots oz. 1.10 - —
Soapbark, whole, bls ..... lb. .38 - .40
crushed, bls., bbls ..... lb. .45 - —
powd., bbls ..... lb. 45 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
t.c.l., stock points 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
t.c.l., stock points 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 4.70 - —
t.c.l., stock points 100 lbs. 5.80 - —
liq., 50%, sellers tanks, works, dry basis 100 lbs. 2.90 - —
rayon type, sellers, tanks, works, dry basis 100 lbs. 2.90 - 3.00
73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
rayon-type, sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10

Soda, caustic, solid, 76%, dms., c.l., works 100 lbs. 4.30 - —
l.c.l., stock points 100 lbs. 5.50 - —
Sal. conc., bgs., c.l., works 100 lbs. 2.50 - —
smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., ogs., c.l., frt. equald lb. .13 - —
dms., l.c.l., frt. equald ..... lb. .13¾- —
NF, 60%, gran., dms., c.l., works lb. .14 - —
l.c.l., works lb. .15½- —
Alginate, NF white powd., dms., 300 lbs. or more lb. .93 - —
p-Aminobenzoate, dms., 1,000-lb. lots or more lb. 2.35 - —
smaller lots ..... lb. 2.45 - 2.55
p-Aminosalicylate, dms., 100 lbs. or more, frt. adjusted lb 2.70 - —
Antimoniate, bbls. c.l., dlvd. E. lb. .28 - —
l.c.l., dlvd. E ..... lb. .29½- —
Arsenate, 45% arsenic pentoxide, dms., c.l., works lb. .12½- —
l.c.l., works lb. .13¾- .14¼
Arsenite, 90%, pink powder, 75% arsenious oxide, dms., works lb. .12¼- —
t.c.l., works lb. .13 - .14½
soln. dms. works gal. .59 - .67
Ascorbate, dms., 25-50 kilo lots. kilo. 12.00 - —
10-kilo lots ..... kilo. 12.35 - —
5-kilo lots ..... kilo. 12.75 - —
1-kilo lots ..... kilo. 13.00 - —
bots., 500-gram lots kilo. 13.50 - —
Benzoate, tech., bbls., dms., lots or more lb. .39 - —
USP bbls. dms. 100-lb lots, or more lb 46 - —
Bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
t.c.l., works 100 lbs. 3.85 - —
powd., bgs., c.l., works, 100 lbs. 2.55 - —
t.c.l., works 100 lbs. 3.45 - —
Bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
l.c.l., works ..... lb. .13½- .14¼
Bifluoride bbls. c.l. works, frt. equald lb. .19½- —
t.c.l., same basis lb. .1990- —
Bisulfate, bulk., c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 3.60
l.c.l. frt. equald 100 lbs. 3.50 4.10
Bisulfite, anhyd. bgs., c.l., works. 100 lbs. 5.00 - —
l.c.l., works ..... 100 lbs. 5.40 - —
soln. 35° bbls., c.l., works. 100 lbs. 1.55 - —
t.c.l. works 100 lbs. 2.05 - —
Borate (see Borax).
Bromide, USP bbls., works lb. .38 - —
Carboxymethyl cellulose (see CMC).
Carbonate, cryst., monohydrated, (see Soda, sal).
monohydrated, bgs., c.l., works. 100 lbs. 3.10 - —
l.c.l., works ..... 100 lbs. 3.50 - —
Chlorate, cryst. dms., c.l., works. lb. .09 - —
l.c.l., works ..... lb. .09½- .10¼
Chloride, tech. (see Salt)
USP, dms., 300 lbs. or more lb. .08 - —
Chlorite, tech. dms., c.l., works. lb. .58 - —
20-ton lots or more, works lb. .66 - —
smaller lots, works lb. .70 .73
Chloroacetate, tech., dms., c.l., works lb. .27 - —
t.c.l. works lb. .28 —
Chromate, anhyd., fiber dms., c.l., t.l., works lb. .14¾- —
l.c.l., same basis ..... lb. .15¼- .16¼
tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
t.c.l. ..... lb. .1065- .1190
Citrate, anhyd., dms ..... lb. .62 - —
NF VIII, gran. dms ..... lb. .26½- .27½
USP XIV gran., dms ..... lb. .29½- .30½
Sodium citrate USP powd. prices ½c. higher
Cyanate, dms., 1,000-lb. lots, works. lb. .85 - 1.10
smaller lots, works ..... lb 1.00 1.25
Cyanide, flake, 96-98%, dms., c.l or 20,000-lb. lots lb. .193 - —
over 1,000-lb. lots ..... lb. .203 - —
100-lb. to 1,000-lb. lots. lb. .213 - —
Granular sodium cyanide 1c. higher
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 - —
l.c.l., works lb. .15¾- —
anhyd., dms., c.l. works lb. .18 - —
l.c.l. works lb. .18¾- —
Ferrocyanide, bgs., 10-ton lots lb. .13½- —
smaller lots. lb. .14 —
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
l.c.l. works lb. .1430- —
Formate, bgs., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Gentisate, 100-lb. fib. dms ..... lb. 5.50 - —
Gluconate, refd., dms. ..... lb. .80 - .83
tech. dms ..... lb. .35 —
Hydride, dms., works ..... lb. 1.80 - 3.00
Hydrosulfide (see Sodium sulfhydrate)
Hydrosulfite dms., c.l. frt. alld. lb. .24 - —
l.c.l., frt. alld ..... lb. .24½- —
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .23½- .28
technical (see Soda Caustic)
Hypophosphite, NF, dms., 1,000-lb. lots lb. .97 - —
Hyposulfite, NF, 1,000-lb. lots lb. .97 - —
Hyposulfite, anhyd., tech., bgs., c.l., works 100 lbs. 7.25 - —
l.c.l., works ..... 100 lbs. 7.65 - —
photo grade, bgs., c.l., works. 100 lbs. 8.03 - —
l.c.l., works 100 lbs. 8.45 - —
Hexahydrate, pea cryst., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l., works 100 lbs. 5.55 - —
photo grade, bgs., c.l., works, 100 lbs. 7.75 - —
l.c.l., works ..... 100 lbs. 8.05 - —
Pentahydrate, tech., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l., works ..... 100 lbs. 5.55 - —
Iodide, USP, bots., dms ..... lb. 2.55 - —
Lactate, edible, 50%, cbys., dms., works lb. .21½- —
60% cbys. dms. works lb. .26½- —
tech., 50% cbys., dms. works lb. .16½- —
Lauryl sulfate, dms. c.l., dlvd lb. .19 - —
l.c.l., dlvd ..... lb. .19½- .20¾
tanks, dlvd ..... lb. .18 - —
Metabisulfite (see Sodium bisulfite).
Metaborate, octahydrate, gran., bgs., c.l., works ton 87.00 - —
ton lots, ex whse ton 143.00 - —
smaller lots, ex whse ton 148.00 - —
tetrahydrate, dms., c.l., works. ton 204.00 - —
ton lots, ex whse ..... ton 242.50 - —
smaller lots, exwhse ton 247.50 - —
Metallic bricks, 14,000-lb. lots or more, works ..... lb. .19½- —
fused, 14,000-lb. lots, works. lb. .19 - —
tanks, works ..... lb. .17 - —

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CLEVELAND 3, OHIO

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Firm _____
Street address _____
City and state _____

Sodium metanilate, bbls., frt. alld.	lb.	.62	—
Metasilicate, anhyd., bgs., c.l., works	100 lbs.	5.70	—
l.c.l., works	100 lbs.	6.15	8.10
dms., c.l.	100 lbs.	6.20	—
l.c.l.	100 lbs.	6.65	8.55
Pentahydrate, bgs., c.l., works	100 lbs.	4.45	—
l.c.l., works	100 lbs.	4.85	6.75
dms., c.l., works	100 lbs.	4.95	—
l.c.l., works	100 lbs.	5.35	7.25
Molybdate, anhyd., dms., works, frt. equald	lb.	.92	.96
cryst., dms., works, frt. alld	lb.	.73	.74
Monoglutamate (see Monosodium Glutamate).			
Monohydrate (see Sodium carbonate monohydrated).			
Naphthionate, bbls	lb.	.70	—
Nitrate, crude, dom., bgs., c.l., works	ton.	47.00	—
bulk, c.l., works	ton.	43.50	—
imp. 100-lb. bgs., c.l., Atl. Gulf, Pac., whse	ton.	49.50	—
bulk, c.l. same basis	ton.	46.00	—
Nitrite, USP, bbls., c.l., works, frt. equald	100 lbs.	8.50	—
l.c.l., same basis	100 lbs.	10.50	—
Orthosilicate, conc., dms., c.l., works	100 lbs.	6.70	—
l.c.l., works	100 lbs.	7.05	7.65
hydrated, flake, bbls., c.l., works,	100 lbs.	5.65	—
l.c.l., works	100 lbs.	7.60	7.90
Oxalate, 88%, bgs., works	100 lbs.	10.85	—
Para-aminobenzoate (see Sodium p-Aminobenzoate)			
Para-aminosalicylate (see Sodium p-Aminosalicylate).			
Pentachlorophenate, briquets, bgs., c.l., works, frt equald	lb.	.26	—
l.c.l. same basis	lb.	.27½	.34
pellets, bgs., c.l., same basis	lb.	.26	—
l.c.l. same basis	lb	.27½	.34
powd., bgs., dms., c.l., same basis,	lb.	.25	—
l.c.l. same basis	lb.	.26½	.33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads. ¼c per lb over carlot prices			
Perborate, NF, tech., bgs., c.l., works	lb.	.19	—
l.c.l., works	lb.	.21	—
Peroxide, dms., c.l., dlvd. E. of Miss	lb.	.20	—
l.c.l. same basis	lb.	.20½	.21
Phenolsulfonate USP IX, gran., dms	lb.	.48	.49
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald	100 lbs.	7.05	—
l.c.l., works	100 lbs.	8.05	8.65
duohydrate, bgs., c.l., frt equald	100 lbs.	7.60	—
l.c.l., frt. equald	100 lbs.	8.10	—
USP dried powd bgs., dms., works	lb.	.19	.20½
monobasic anhyd., bgs., c.l., frt. equald	100 lbs.	8.70	—
l.c.l., frt equald	100 lbs.	9.10	9.70
tribasic, anhyd., bgs., c.l., frt. equald	100 lbs.	8.00	—
l.c.l., frt. equald	100 lbs.	9.05	9.65
cryst., bgs., c.l., t.l., frt. equald	100 lbs.	4.40	—
l.c.l., frt. equald	100 lbs.	4.80	5.40
Sodium phosphates in dms. 60c higher than bgs			
Prussiate, yellow (see sodium ferrocyanide).			
Pyrophosphate, acid, bgs., c.l., works, frt. equald	100 lb.	10.85	—
l.c.l., works	100 lbs.	11.60	11.85
Ferric, dms., c.l., t.l., works	lb.	.36	—
l.c.l., works	lb.	.37	.39
tetrabasic, anhyd., bgs., c.l., works, frt. equald	100 lbs.	7.52½	—
l.c.l. frt. equald	100 lbs.	7.92½	8.52½
Salicylate, USP, dms	lb.	.74	.76
Sesquicarbonate, bgs., c.l., works,	100 lbs.	2.35	—
l.c.l., divd. zone 1	100 lbs.	4.10	4.35
zone 2	100 lbs.	4.35	4.60
zone 3	100 lbs.	4.75	4.90
zone 4	100 lbs.	5.35	5.60

Sales zones are: (1) Atl. States E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis), Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex

Sesquisilicate, hydrated, bgs., c.l., works	100 lbs.	5.00	—
l.c.l., works	100 lbs.	5.35	—
dms., c.l., works	100 lbs.	5.50	—
l.c.l., works	100 lbs.	5.85	—
Silicate, liq., 40° Be, 1:3.2, turbid, dm., c.l., works	100 lbs.	1.55	—
l.c.l., works	100 lbs.	1.90	2.40
tanks, works	100 lbs.	1.20	—
47° Be, turbid, 1:2.9, dms., c.l., works	100 lbs.	2.25	—
l.c.l., works	100 lbs.	2.95	3.10
tanks, works	100 lbs.	1.90	—
52° Be, turbid, 1:2.4, dms., c.l., works	100 lbs.	2.65	—
l.c.l., works	100 lbs.	3.00	3.50
tanks, works	100 lbs.	2.30	—
solid, 1:3.2, bgs., works	ton.	67.50	—
Silicofluoride, bgs., c.l. works	lb.	.075	—
l.c.l. works	lb.	.079	—
Sodium silicofluoride in dms. 0.4c per lb higher			
Stannate, dms. works frt alld. E	lb.	.648	.707
Sulfa drugs (see Sulfa name)			
Sulfanilate, bbls. works	lb.	.22	—
Sulfate, NF, VII, dried, powd., dms	lb.	.22½	—
tech., anhyd. bgs. c.l., dlvd. E	ton.	52.00	—
detergent, rayon grade, bgs., c.l., works	ton.	34.00	—
bulk, c.l., works	ton.	31.00	—
USP, cryst., fib. dms	lb.	.17½	.18
gran., fib dms	lb	.17½	.18
Sulfhydrate, flake, 70-72%, dms., c.l., works	lb.	.06¾	—
l.c.l., works	lb.	.07¾	—
liq., 40-44% tanks, works, 100% basis	ton.	120.00	—
Sulfide, flake dms., c.l., works, E., frt. equald	lb.	.05½	—
l.c.l., same basis	lb.	.06½	—
fused bbls. c.l. works E., frt. equald	lb.	.05	—
l.c.l., same basis	lb.	.06	—
Sulfite, anhyd., bgs., c.l.	100 lbs.	3.50	—
t.l., same basis	100 lbs.	4.00	—
Sulfocyanide, CP (see Sodium thiocyanate)			
Tetraborate (see Borax)			
Tetrasulfide, liq., 40%, dms., c.l., c.l., works	lb.	.04	—
l.c.l., works	lb.	.05	—
Thiocyanate, CP, dms	lb.	.55	.65
tech., anhyd. dms. 1 ton lots or more, works	lb.	.317	—
less than ton lots works	lb.	.337	—
Thiosulfate, NF, cryst., bbls	lb.	.13½	—
tech. (see Sodium hyposulphite)			
Sodium titanate, ctns., c.l., works	lb.	.10½	—
5-ton lots, works	lb.	.10¾	—
1-ton or less, works	lb.	.11	—
Toluene sulfonate, dms., c.l. or t.l.	lb.	.38	—
l.c.l.	lb.	.42	—
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E	lb.	.37½	—
l.c.l. frt. adjusted, E	lb.	.39½	—
50-lb. dms., c.l. frt. alld. E.	lb.	.38	—
l.c.l., frt adjusted E	lb.	.40	—
10-lb. cns., c.l., frt. alld E	lb.	.44	—
l.c.l., frt. adjusted E	lb.	.46	—
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c per pound higher.			
Tripolyphosphate, bgs., c.l., works, frt. equald	100 lbs.	7.87½	—
l.c.l., same basis	100 lbs.	8.27½	8.87½
Trisilicate, powd., 1:3.2, bgs., c.l., works	100 lbs.	8.65	—
l.c.l., works	100 lbs.	9.40	9.80
dms., c.l., works	100 lbs.	9.05	—
l.c.l., works	100 lbs.	9.80	10.40
Tungstate, tech., kgs., dlvd. E	lb.	2.15	—
Sodium-ammonium phosphate, bbls., works frt equald	lb.	.23	—
Sodium-carboxymethyl cellulose (see CMC).			
Sodium-cinchophen (see Cinchophen-sodium).			
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd	lb.	.21	—
l.c.l., same basis	lb.	.21½	—
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works	lb.	.28	—
smaller lots, same basis	lb.	.30	—
Solvent naphtha, coaltar, high flash, tanks, frt. equald	gal.	.31	.32
petroleum (see Petroleum solvent, partial aromatic).			
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works	lb.	.32	—
10,000 to 20,000-lb lots, works.	lb.	.34	—
smaller lots, works	lb.	.37	.39
Tristearate, fib dms., 20,000-lb. lots, works	lb.	.33	—
10,000 to 20,000-lb lots, works.	lb.	.35	—
smaller lots, works	lb.	.38	.40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works	lb.	.23	—
1 to 5-ton lots, works.	lb.	.25	.28
powd., dms., 1 to 5-ton lots, works	lb.	.38	.43
soln., comi., aqueous dms., c.l., works	lb.	.24¼	—
ton lots, works	lb.	.25	—
smaller lots, works	lb.	.25¼	—
tanks, works	lb.	.23¼	—
reg. 70% aqueous, dms., c.l., works	lb.	.16	—
ton lots, works	lb.	.16¾	—
smaller lots, works	lb.	.17	—
tanks, works	lb.	.15	—
Soybean meal, 44% bulk, Decatur.	ton.	47.00	—
protein, chemically isolated, bgs., c.l., works	lb.	.23	—
mechanically refd. bgs., l.c.l., works	lb.	.066	—
Sparteine sulfate, cns	oz.	.80	.90
Spearmint leaves, dom. bls	lb.	75	—
Spruce extract, liq., reg tanks, works	lb	01¾	—
powd. super bgs. c.l., works	lb	05¼	—
l.c.l., works	lb	05½	—
Squill, white, bls	lb	16	18
powd., bbls., bxs	lb	17	20
St. John's bread edible bls	lb	13	15
Stannic chloride anhyd., dms., works	lb.	.804	.814
Oxide, dms., dlvd. E	lb.	1.06½	1.07½
Stannous chloride anhyd., dms., works	lb.	.933	1.427
hydrous, cryst., dms., works.	lb.	.81½	.82½
Sulfate, dms., works	lb.	1.067	1.087
Starch corn pearl paper bgs., c.l.	100 lbs.	7.32	—
l.c.l.	100 lbs.	7.47	—
powd., paper bgs., c.l.	100 lbs.	7.44	—
l.c.l.	100 lbs.	7.59	—
Prices for corn starch in cotton bags 15c per 100 lbs higher			
Potato, dom., Idaho bgs., c.l., works	lb.	.06	—
Maine, bgs., c.l., works	lb.	.06¼	—
ex whse, N. Y.	lb.	.08¼	.09¼
Rice, bgs., l.c.l.	lb	15½	16
Wheat, bgs	lb	08½	09
Star root (see Helonias root)			
Stargrass Root (see Aletris root)			
Stavesacre seed, bgs	lb	60	.61
Stearine oleo (see Oleostearine)			
Stramonium leaves, bgs	lb	.18	.20

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Becco Sodium Perborate Tetrahydrate is widely used in the popular powder bleaches. Manufactured by a continuous process, Becco Sodium Perborate is a remarkably uniform product.

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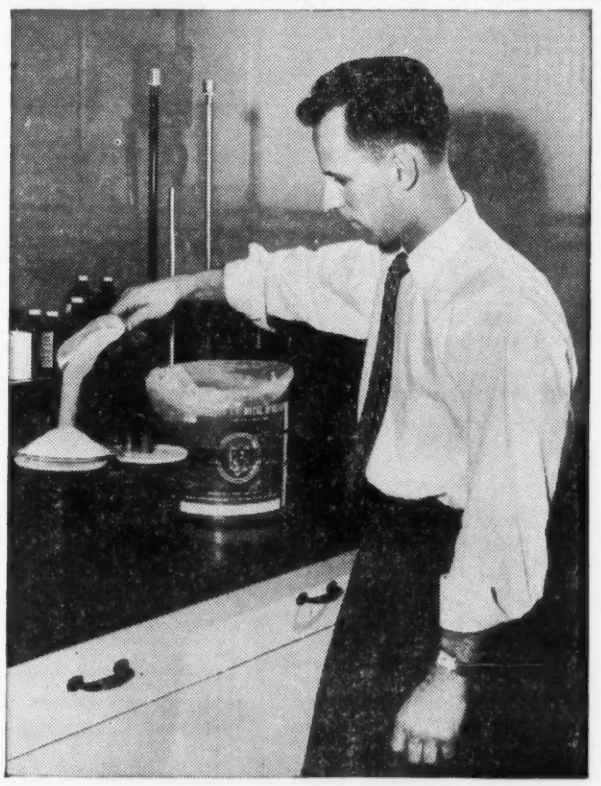

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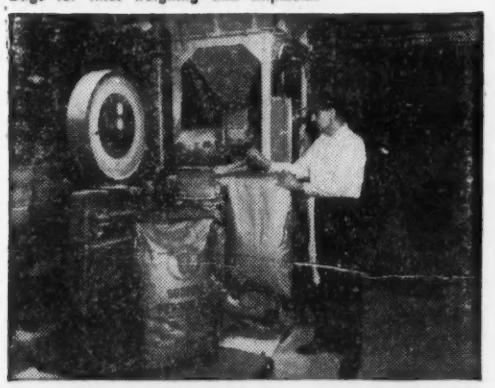

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Soybean meal 44% bulk, Decatur
Streptomycin hydrochloride bulk, gram lb. .0850- .0875
Strontium bromide, NF, dms., 150-lb. fib. dms lb. .88 - —
Carbonate, pure, dms. 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, pars, 25-lb lots lb 3.52 - —
Nitrate, bbls., c.l., works 100 lbs. 11.00 - —
l.c.l., works 100 lbs 12.00 - —
Salicylate NF dms lb 1.78 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton. 56.70 - 60.15
Strophanthin, K., bots. oz. 25.00 - 25.50
G. (see Ouabain, USP)
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax USP cs lb .78 .80
Styrene monomer, polymer grade, 99½% dms. c.l. frt. alld. lb. .22½ - —
l.c.l. same basis lb. .23½ - —
tanks, same basis lb. .20½ - —
synthetic rubber grade, 99% dms., c.l. frt. alld lb. .18½ - —
l.c.l. same basis lb. 19½ - —
tanks, same basis lb .16 - —
Styrolyl acetate, bots lb 1.45 1.70
Sucrose, refd., white, bgs. refy., E lb. .0085 —
Octa-acetate, denaturing grade, 100-200-lbs. bgs., l.c.l., works lb 76 —
Sugar (see Sucrose).
Sulfabenzamide, dms lb 4.00 4.50
Sodium dms lb 4.10 4.60
Sulfacetamide, fib dms lb 4.00 4.20
USP, same basis lb. 5.00 5.20
Sodium fib dms lb 5.00 5.20
USP, same basis lb 5.20 5.40
Sulfadiazine USP microcrystals, dms lb. 10.60 - 11.10
powd. dms lb. 10.25 10.75
Sulfadiazine-sodium USP dms lb. 11.25 - 11.75
microcrystals, dms lb. 11.60 - 12.10
Sulfaguanidine USP dms lb 2.50 —
Sulfamerazine USP microcrystals lb. 10.65 - 11.15
Sulfamerazine-sodium USP dms. lb. 11.25 - 11.75
Sulfamethazine microcrystals dms., lb 8.90 9.40
powd., dms lb 8.50 9.00
Sulfanilamide USP 30-80 mesh, dms lb 1.40 1.60
microcrystals, dms lb 1.70 1.90
powd., dms lb 1.30 1.50
Quinoxaline, veterinary, dms lb 6.40 6.75
Sulfapyridine NF powd, bots, tins, lb 7.00 7.50
Sulfapyridine-sodium monohydrate, dms lb 7.50 8.00
Sulfathiazole, NF, microcrystals, dms lb 2.85 3.00
powd, dms lb 2.50 2.65
Sulfathiazole-sodium, NF, dms lb. 2.75 2.90
Sulfur, coml., flour, bgs., mines, 100 lbs. 2.55 - —
bbls., mines 100 lbs 3.30 - —
lump, bgs., mines 100 lbs 2.45 - —
bbls., mines 100 lbs 2.90 - —
crude, bulk, f.o.b. cars, mines, long-ton 26.50 - —
export f.o.b. vessels Gulf ports, long-ton 28.00 - —
domestic and Canada, f.o.b. vessel Gulf port long-ton 28.00 - —
refd. flowers USP, bgs., mines 100 lbs 4.25 - —
bbls., mines 100 lbs. 5.50 - —
flour, light, bgs., mines 100 lbs 3.85 - —
bbls., mines 100 lbs 4.75 - —
lump, bgs., mines 100 lbs 3.55 - —
rolls, bgs., mines 100 lbs 4.10 - —
bbls., mines 100 lbs 4.65 - —
salt block, bbls., mines 100 lbs. 3.75 - —
virgin block, bbls., mines 100 lbs 3.70 - —
rubbermakers, coml., reg. bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.80 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs 3.90 - —
refd., bgs., mines 100 lbs. 3.50 - —
bbls. mines 100 lbs 4.55 - —
treated 2.5% mineral oil, bgs. mines 100 lbs 2.95 - —
bbls mines 100 lbs 4.10 - —
Dichloride, dms., c.l., works, frt. equald lb. .04 - —
l.c.l. same basis lb. 04¾ - —
tanks same basis lb. 03¾ - —
Dioxide liq., coml., cyls, works, frt. equald lb. .10 .12
multi unit cars, works lb. .0535 —
tanks, works lb. 045 —
refrigeration 150-lb cyls, dlvd. lb. .30 —
Monochloride, 55-gal. dms., c.l., frt. equald lb. .04 - —
l.c.l. same basis lb 04¾ - —
tanks, same basis lb. 03¾ - —
Sumac leaves, 28% tannin, bgs., ex-dock ton. 130.00 - —
ground, bgs., ex-dock ton. 130.00 - —
Superphosphate, run-of-pile under 22% a.p.a. pulv., bulk, c.l., Baltimore unit-ton .88 .91
Carteret, N. J. unit-ton .88 .91
triple, 48% or more a.p.a. pulv., bulk c.l. East Tampa, Fla. unit-ton .98 - —

T

2,4,5-T dms. c.l. works, frt. equald. lb 1.18 - —
l.c.l. same basis lb 1.25 - —
isopropyl ester dms., c.l., works, frt. equald lb 1.24 - —
l.c.l. works lb 1.29 - —
Talc, dom. ord. Calif. grd. ngs., c.l., works ton 33.00 - 39.50
Vermont off color grd., bgs., c.l., works ton 19.40 - —
l.c.l., works ton 37.00 - —
fibrous, New York, grd., bgs., c.l. works ton 28.00 - —
l.c.l. works ton 31.00 - 36.00
99.5% 325 mesh bgs. c.l. works ton 31.00 - —
l.c.l., works ton 34.00 - —
99.95% micronized, bgs. works ton 38.00 - —
Imp Canadian grd bgs., c.l. mines ton 20.00 - 45.00
Tallow, edible, tanks, dlvd lb. .14 - .14¼
inedible, fancy, bleachable, tanks, dlvd lb. .07⅝ - —
guaranteed, dms., f.a.s. lb. .09⅛ - —
No. 1, tanks, dlvd lb. .06⅝ - —
prime, tanks, dlvd lb. .07⅜ - —
special tanks, dlvd lb. .07 - —
sulfonated, 25%, bbls., l.c.l. lb. .06⅜ - .07⅛
50%, bbls., l.c.l lb. .09⅜ - .10⅛
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton, 5.00 - —
Chicago, bulk unit-ton, 6.00 - —
Tapioca flour Brazilian bgs. ex whse lb. .10½ Nom.
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. 47 49
l.c.l. same basis gal. 50 51
tanks, same basis gal .39 —
25-28%, dms., c.l., same basis, gal. .54 - .56
l.c.l. same basis gal .57 .58
tanks, same basis gal 46 —
50-53%, dms., c.l. same basis, gal. .70 - .72½
l.c.l. same basis gal. 73½ 74½
tanks, same basis gal 62½ —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartarate)
Terpine glycol ether dms., c.l., works lb. .23½ —
l.c.l. works lb. 25½ —
tanks works lb 22 —
Hydrate, NF, cryst., powd., 100-lb fib dms lb. .70 - —
Terpineol, dms., l.c.l., dlvd E lb. .23¾ - —
extra dms lb .41 60
prime, dms lb 30 45
Terpinyl acetate extra cns. dms. lb 60 75
prime, dms lb .55 70
Propionate dms lb 1.75 2.00
Terra alba (see Gypsum)
Testosterone USP 100-gm lots, bots gram. 70 - —
Propionate USP 100-gm lots, bots gram. 68 - —
Tetrachloroethane dms works lb. 14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene tech (see Perchloroethylene)
USP 55 gal dms. works lb. .20½ .21½
smaller dms. works lb. 23½ 25
Tetraethyl orthosilicate dms., c.l., dlvd E lb. 61½ - —
l.c.l. dlvd. E lb. .62½ - —
Pyrophosphate 40% cns., dms., frt equald lb. 75 - —
Tetraethylenepentamine dms c.l., dlvd E lb. .49 - —
l.c.l. dlvd E lb. .50 - —
tanks, dlvd E lb 47 - —
Tetrahydrofuran dms. c.l. or t.l., works lb. .36½ - —
l.c.l. or t.l. works lb. .37 - —
tanks, works lb 35 - —
Tetrapotassium phosphate (see Potassium phosphate)
Thallium metal dlvd lb. 12.50 - 15.00
Sulfate 99% bots dlvd lb 8.00 13.00
Theobromine, NF, fib. dms. lb. 4.00 - —
And sodium acetate USP fib dms lb. 4.45 - —
Sodio-Salicylate, NF, fib. dms lb. 3.60 - —
Theophylline, anhyd., or USP., 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular fib dms kilo. 60.00 - —
ampule grade fib dms kilo. 62.00 - —
Mononitrate USP fib dms kilo 62.00 - —
Thiocarbanilide dms. ton lots lb 72 - —
less ton lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine)
Thiourea, tech., bgs., t.l., frt. alld. lb .33 - —
l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif. fib dms., 100-lb lots or more, works lb. 3.50 —
dl-Threonine bots. 1-kilo lots, kilo. 450.00 500.00
Thymol, fib. dms lb 2.50 2.75
Iodide, NF, dms lb 7.30 —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Oxide (see Stannic oxide).
Metal (Straits) lb. 1.02 - —
Sulfate (see Stannous sulfate).
Tetrachloride anhyd., (see Stannic chloride, anhydrous)
Titanium dioxide anatase, chalk-resistant, bgs. c.l., dlvd lb. .24½ - —
l.c.l., dlvd lb. .25½ - —
ceramic, bgs., c.l., dlvd lb. .22½ - —
l.c.l., dlvd lb. .23½ - —
reg., bgs., c.l., dlvd lb. 22½ - —
l.c.l., dlvd lb. .20½ - —
metallurgical, nat., gran., bgs., c.l., f.o.b Jacksonville, Fla ton 120.00 - —
Niagara Falls, N. Y., c.l., ton 137.50 - —
5-ton lots ton 142.50 - —
ton lots ton 147.50 - —
rutile nonchalking, bgs., c.l., dlvd. E lb. .26½ - —
l.c.l. dlvd E lb .27½ - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Hydride, cns. works lb 7.95 9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd lb. .09¼ - —
l.c.l., works lb. .09¾ - —
high-tinting, dms., c.l. lb. .09 - —
l.c.l. lb. .09½ - —
Tetrachloride tech., dms., c.l., works lb. .26 - —
l.c.l., works lb. .27½ - .29
tanks, works lb. .20 - —
dl-a-Tocopherol, bots kilo. 134.20 - —
Acetate, bots kilo. 122.00 —
25% dry, powd., bots kilo. 30.50 - 32.00
Acid succinate kilo. 165.00 - —
o-Tolidine, base paste kgs. 100% basis lb 1.35 - —
dry, kgs., 100% basis lb 1.40 - —
Hydrochloride paste, kgs., 100% basis lb 1.35 - —
Tolu balsam, cns lb. 4.85 - —
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
l.c.l. same basis lb. .80 - —
tanks same basis lb. 78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
l.c.l. same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid, dms, frt. alld lb. .60 - .61
Toluol, coaltar, indust or nitration, tanks, works:—
Bethlehem, Pa gal. .32 - —
Birmingham dist gal. .32 - —
Chicago, dist gal. .32 - —
Cleveland dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N. Y gal. .32 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .32 - —
Toluol, coaltar, indust. or nitration, tanks, works:—
Middletown, Ohio gal. .33½ - —
Minnequa, Colo. gal. .32 - —
Philadelphia dist gal. .32 - —
Pittsburgh dist gal. .32 - —
Sparrows Point, Md gal. .32 - —
Terre Haute Ind gal. .35 - —
Youngstown Ohio gal. .32 - —
Petroleum indust., 2°, tanks, works:—Albany, N Y gal. .35 - —
Bayonne, N. J gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Detroit, Mich gal .35 - —
Houston, Tex gal. .33 - —
Philadelphia, Pa gal. .34 - —
Wood River, Ill gal. .34 - —
2,4-Tolylenediamine cryst. fib. dms., c.l. frt alld lb .97 —
l.c.l., frt alld lb. 1.00 —
powd. fib dms. same basis lb 1.00 —
Tonka beans, Angostura, cks. lb. No prices.
Brazilian, Surinam, cs lb. 1.35 —
Totaquine 100-oz lots, cns oz. .42 —
Toxaphene dms. c.l., t.l. works lb. .21 - —
l.c.l., t.l., works lb. .27 - —
Triacetin, dms. c.l., dlvd. E of Rockies lb. .39 - —
l.c.l. same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate tech., non-ref. dms., c.l. frt alld E of Denver lb. .42½ - —
l.c.l. frt alld E of Denver, lb. .43½ - —
tanks frt alld E of Denver, lb. .40 —
Phosphate, dms., c.l., works lb. .52½ - —
l.c.l., same basis lb. .53½ - —
tanks same basis lb. .50 - —
Tributyltamine, dms., c.l., works lb. .67½ - —
l.c.l., same basis lb. .68½ - —
tanks, same basis lb. .65 - —
Trichlorobenzene, dms., c.l., frt. alld. E lb. .14½ - —
l.c.l. frt alld E lb. .15½ - —
tanks, frt alld E lb. .13 - —
Trichlorobenzene prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .12½ - —
l.c.l., dlvd. E. lb. .14½ - —
tanks, works, frt. equald lb. .11¼ - —
1,1,1-Trichloroethane, dms., c.l., works lb. .13½ - —
l.c.l., works lb. .14¼ - .16¼
tanks, works lb. .11½ - .12½
Tricholine citrate, 65% soln., ref. chys. works, frt adjusted lb. 1.40 1.45
Tricresyl phosphate coaltar, dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .36 - —
tanks, dlvd lb. .32½ - —
petroleum, dms., c.l., dlvd lb. .34½ - —
l.c.l., dlvd lb. .35½ - —
tanks, dlvd lb. .32½ - —
Triethanolamine dms., c.l., dlvd. E lb. .24½ - —
l.c.l., same basis lb. .25½ - —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works, dlvd E lb. .49 - —
tanks, same basis lb. .46½ - —
Triethyl citrate, refd, tech., non-ref. dms. c.l., frt. alld E. of Denver lb. .45¾ - —
l.c.l. frt alld E of Denver, lb. .46¾ - —
tanks frt. alld E of Denver, lb. .43¾ - —
Phosphate, dms., c.l., dlvd lb. .40½ - —
l.c.l. dlvd lb. .41½ - —
tanks, dlvd lb. .38 - —
Triethylene glycol dms. c.l. dlvd. E lb. .21 - —
l.c.l., dlvd., E lb. .22 - —
Triethylenetetramine, dms., c.l., dlvd E lb. .51½ - —
l.c.l., dlvd E lb. .52½ - —
tanks, dlvd E lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd E lb. .23¼ - —
l.c.l. dlvd E lb. .24¼ - —
tanks, dlvd E lb. .20¾ - —
Trimethylamine 25-40% soln. dms., c.l., works, frt equald., 100% basis lb .42 - —
l.c.l. works frt equald, 100% basis lb. .42½ - —
tanks works frt equald, 100% basis lb .33 - —
Trioxane, pure, dms., c.l., t.l., works lb. .50 - —
l.c.l., works lb. .51½ - —
Tripentaerythritol bgs., l.c.l., works. lb. .35 - —
Triphenyl phosphate bbls. c.l. frt. equald lb. .40 - —
l.c.l., frt. equald lb. .41 - —
Triphenylguanidine bbls., works lb. .90 - —
tanks, same basis lb. .18½ - —
Tripropylene glycol, dms., c.l., frt. alld E lb. .20½ - —
l.c.l. frt alld E lb .21½ —
Tripopylene glycol prices 1c. per lb. higher in West.
Phosphate (see Sodium phosphate tribasic)
Tyrothricin, USP bots gram. 75 - .85
dl-Tryptophane, fib ctns., works. kilo. 165.00 —
Tungsten metal powd. 2-5 microns, dms., works lb. 4.20 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, 46% N. indust., bgs., c.l., t.l., dlvd. E ton. 120.00 - —
l.c.l. dlvd. E, ex whse ton 140.00 - —
45% N. agricultural, bgs., c.l., (30 tons), dlvd. E ton. 105.00 - —
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va ton. 126.00 - —
C grade, tankcars, same basis. ton. 124.50 - —
37 grade, tankcars, same basis, ton. 153.00 - —
Urethane, USP dms. lb. 1.45 - —
Uva-ursi leaves, bls lb. .12 - .14

V

Valerian root, Belgian, bgs. lb. .35 - —
Indian, bgs. lb. .27 - —
dl-Valine, dms., works lb. 21.00 - 27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton. 86.00 - —
cups, 28-30% tannin, bgs., ex-dock ton. 64.00 - —
extract, powd., 63% tannin, bgs., exdock, duty extra lb. .09¾ - —
Vanadium pentoxide, tech., dms., works lb 1.28 1.33
Vanilla beans, Bourbon, tins lb. 8.00 - 8.50
Mexican, cuts, tins lb. 7.50 - 7.75
whole, tins lb. 8.25 - 8.50
Tahiti, cs lb. 7.00 —
Vanillin ex eugenol, tins, 25-lb lots. lb. 6.50 6.75
smaller lots lb 6.90 7.25
ex lignin, dms., 100-lb. lots lb. 2.75 - —
smaller lots lb. 2.80 2.85
Vinyl acetate monomer, 55-gal. dms., c.l., works lb. .19 - —
l.c.l., works lb. .20 - —
tankcars, works lb. .16½ - —
tanktrucks less than 4,000 gal., works lb. .17½ - —
n-Butyl ether, tech. dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, tanks, works lb 11 .12
Ether, USP, anesthesia, bots., 50 c.c., hospitals bot. 1.12 - —
75 c.c bot 1.56 - —
tech. dms., c.l., works lb .26 - —
l.c.l. works lb. .28 - —
tanks works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
c.c.l. works lb. .30 - —
tanks works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks works lb .20 —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made
Propionate monomer, dms., c.l., dlvd lb. .49 —
l.c.l. same basis lb .50 —
tanks, same basis lb .47 —
Trichloride (see Trichloroethane)
2-Vinylpyridine 10 dms to tanks, works lb 1.36 —
1 to 9 dms. works lb 1.50 —
tanks, works lb 1.33 —
Vinyltoluene, dms., c.l., frt. alld lb. .18½ —
l.c.l., frt. alld. lb. .19½ —
tanks, frt. alld lb. .16 —
Viosterol in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½ - .04¼
Vitamin A acetate, syn. crystalline, beads 500,000 A units per gram gram. .07¼ —
dry 500,000 units per gram, kilo lots kilo. 67.50 - —
325,000 units per gram, same basis kilo. 43.88 - —
250,000 units per gram, same basis kilo. 33.75 —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies
liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units. .10 - —
in oil 1,000,000 A units per gram 1,000,000 units. .10 - —
B, (see Thiamine hydrochloride).
B_2 (see Riboflavin)
B complex natural (see Rice bran concentrate and Yeast)
B_{12} crystalline, 1-gram or 5-gram vials gram. 245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram. 185.00 - —
C (see Acid ascorbic)
D (see Oils, codliver and fish-liver Calciferol, and Viosterol)
D_2 dry 850,000 units per gram, kilo lots kilo. 42.50 - —
less than kilo lots kilo. 45.00 - —
E (see a-Tocopherol and Oil, wheat germ)
G (see Riboflavin)
H (see Biotin)
K Active (see Menadione)
K, 25 gram bots gram. 4.50 —
Violet methyl toner (see Blue methylviolet toner)
V.M.&P. naphtha (see Petroleum naphtha)

W

Wahoo root, bark, bls. lb. 2.25 - —
dlvd lb 1.95 - —
25-49-lb lots, N. Y. or Chicago. lb. 2.05 - —
5-24-lb lots, cns. N. Y. or Chicago lb 2.15 —
Wattle bark, fair average, African bls., ex dock ton. 95.00 - 96.00
merchantable, bls. ex dock ton. 91.00 - 92.00
extract, liq., 35% tannin, bbls lb. .08¼ - .08⅝
solid, E. Africa 64% tannin, bgs. ex dock, duty extra lb. .09⅞ - —
S. Africa, 60% tannin, bgs., ex dock duty extra lb. .10 - —
Warfarin 0.5% dms. 50-lb. lots,
Wax, amorph. (see Wax micro crystalline)
Bayberry bgs lb. .45 - .47
Bees, crude, African, bgs lb. .69 - —
Brazilian, bgs lb. .71 Nom.
Central American, bgs lb. .68 Nom.
Chilean, bgs lb. .71 Nom.
refd., USP, bleached, white bricks, 100-lb ctns lb. .80 - .82
slabs, 100-lb ctns lb. .79 - .81
yellow, bricks, 100-lbs. ctns. lb. .71 - .73
slabs, 100-lb. ctns lb. .70 - .72
Candelilla, crude, bgs lb. .70 - .71
refd., bgs lb. .73 - .74
Powdered candelilla: 20 to 100 mesh, 7c higher.
Carnauba, chalky, bgs., ton lots, lots lb. .65 - .66
North country No. 2, crude, bgs., ton lots lb. .73 Nom.
No. 3, Ceara, crude, bgs., ton lots lb. .66 - .68
refd., pure, bgs., ton lots lb. .74 - .75
tech., bgs., ton lots lb. .66 - .67
Parnahyba, crude, bgs., ton lots lb. .68 - .69
refd., pure, bgs., ton lots lb. .75 - .76
yellow, No. 1, Ceara, bgs., ton lots lb. 1.38 - 1.40
Parnahyba, bgs., ton lots lb. 1.40 - 1.42
Powdered carnauba wax price differentials same as powdered candelilla
Japan, cs lb. .45 - .46
Microcrystalline, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Montan, dom., refd., bgs lb. .29 - .30
imp., crude, Bohemian, bgs. lb. .26 - .28
German, bgs lb. .35 Nom.
Ouricury, refd., pure, bgs lb. .85 - .86
tech., bgs lb. .80 - .82
Paraffin (see P)
Spermaceti, blocks, cs lb. .30 - .33
cakes cs lb. .31 - .34
Sugar cane, dom., refd., slabs, 80 lbs ctns., works lb. .65 - .75
spot lb. .67¼ - .72¼
White lead (see Lead, White).
White pine bark, rossed, bls lb. .18 - .19
White precipitate, USP powd. dms., lb. 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .20 - —
rossed, bls lb. .21 - —
Witch hazel, bark, bls lb. .16 - .17
leaves, bls lb. .27 - —

Wollastonite, fine, bgs., c.l., works, ton 39.50 - —
l.c.l., ex whse ton 56.00 - —
medium, bgs., c.l., works ton 27.00 - —
l.c.l., ex whse ton 44.00 - —
Woolfat, crude (see Degras), USP (see Lanolin).
Wormseed, American, bgs. lb. .20 - .25
Levant, bgs. lb. 4.25 - 4.50
45°-47°C., dms., c.l. same basis,

X

Xylene (see Xylol).
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
56°-58°C., dms., l.c.l., works, frt. equald lb. .30 - —
45-47°C., same basis lb. .212 - —
l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
fraction, b.r., 7°-9°C., dry above 227°C., dms., c.l., same basis gal. .96 - —
l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
l.c.l., same basis gal. 1.14 - —
tanks, same basis gal. 1.00 - —
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works lb. .39 - —
l.c.l. same basis lb. .40 - —
tanks, same basis lb. .38 - —
Xylol, coaltar, indust., tanks, works:—
Bethlehem, Pa. gal. .34 - —
Birmingham dist. gal. .32 - —
Chicago dist. gal. .35 - —
Cleveland dist. gal. .34½ - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Middletown, Ohio gal. .34 - —
Minnequa, Colo. gal. .34 - —
Philadelphia dist. gal. .34 - —
Pittsburgh dist. gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind. gal. .35 - —
Youngstown, Ohio gal. .32½ - —
Petroleum, indust., tanks, works:—
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Houston, Tex. gal. .33 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —

Y

Yara, yara, cns. lb. 2.15 - 2.65
Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms lb. .47 - —
90 int'l B units per gram, 100-lb. dms lb. .52 - —
200 int'l B units per gram, 100-lb. dms lb. .56 - —
300 int'l B units per gram, 100-lb. dms lb. .60 - —
debittered, USP Saccharomyces, dlvd lb. .27 - —
Torula, USP dlvd. lb. .18 - —
Yellow, barium chromate, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb. .33 - —
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below
Benzidine, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. lb. 2.45 - —
Lightfast, bbls., dlvd. lb. 3.25 - —
Cadmium, CP, all shades, bbls., frt. alld E. of Rockies lb. 2.05 - —
Selenide lithopone, all shades, bbls., frt. alld. E. of Rockies lb. 1.15 - —
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher.
Chrome, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .33 - —
Dlvd. Ala., Fla., Ga. La. (Shreveport 1¼ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Hansa, 10 g., bbls., same basis as yellow, crome lb. 2.35 - —
G pigment, bbls. lb. 2.20 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .06 - —
Peruvian type bgs., l.c.l. lb. .0205 - .0345
pure, bgs., c.l., works lb. .11½ - —
l.c.l., works lb. .11¼ - —
Mercury, oxide, bbls., 1,000-lb. lots, lb. 5.50 - —
smaller lots lb. 5.60 - —
Ocher (see Yellow, iron oxide, natural).
Zinc (chromate), bbls., dlvd. lb. .29 - —
basic, bbls., dlvd. lb. .34 - —
Yerba santa leaves, bls. lb. .40 - .42
Yohimbine hydrochloride, bots, tins, oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more lb. .38 - —
1,000 to 36,000-lb. lots, works lb. .40 - —
smaller lots, works lb. .43 - —
Zinc acetate, NF VIII, dms. lb. .53 - —
tech., dms., works lb. .29½ - .29¾
Borate, bgs., c.l., dlvd. E. lb. .192 - —
l.c.l. dlvd. E lb. .202 - —
Chloride, NF, gran., dms. lb. .42 - —
precip., powd., dms. lb. .26 - —
soln. 50% dms. c.l. works, 100 lbs. 5.80 - —
l.c.l., works 100 lbs. 6.40 - —
tanks, works 100 lbs. 5.15 - —
tech., fused, dms., c.l., works, 100 lbs. 10.70 - —
l.c.l., works 100 lbs. 11.20 - —
gran 6lb. dms., c.l., works, 100 lbs. 11.45 - —
l.c.l., works 100 lbs. 11.95 - —
Chromate (see Yellow, zinc).
Cyanide, kgs. 1,000-lb. lots or more, works lb. .523 - —
smaller lots, works lb. .543 - —
Dust, pigment, bbls., c.l., works lb. .17½ - —
l.c.l., works lb. .18½ - —
Fluoride, bbls., works lb. .49 - .50
Hydrosulfite, dms., c.l., frt. alld. lb. .22 - —
l.c.l., frt. alld. lb. .24 - —
Zinc metal, prime western slabs, E. St. Louis lb. .13½ - —
New York lb. .14 - —
Naphthenate, liq., 8% Zn., dms., frt. Alld. lb. .24½ - —
10% Zn. dms., frt. alld. lb. .30 - —
Nitrate, tech., cryst., bbls., works, lb. .20 - —
Oxide, pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½ - —
l.c.l. same basis lb. .15½ - —
leaded, 35%, bgs., c.l., mills, frt. alld. lb. .15½ - —
l.c.l., same basis lb. .16½ - —
50%, bgs., c.l., same basis lb. .15⅞ - —
l.c.l., same basis lb. .16⅞ - —
French process, coml., green seal, bgs., c.l., frt. alld lb. .15¾ - —
l.c.l., same basis lb. .16¾ - —
red seal, bgs., c.l., same basis lb. .15¼ - —
l.c.l., same basis lb. .16¼ - —
white seal, bgs., c.l., same basis lb. .16¼ - —
l.c.l., same basis lb. .17¼ - —
USP, ctns., c.l., frt. alld lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
Zinc oxide Pac. Coast prices 1c. higher.
Phenolsulfonate, NF, gran., dms. lb. .43 - .44
powd., dms. lb. .48 - .53
Resinate, precip., 7.2-7.6% Zn., dms., frt. alld lb. .39 - —
Silicofluoride, dms., works lb. .12½ - .14
Zinc stearate, tech., USP, ctns., c.l. lb. .41 - —
l.c.l. lb. .42 - .46
Sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd. E 100 lbs. 8.75 - —
l.c.l., dlvd. E 100 lbs. 9.75 - —
Zinc sulfate in bbls. 40c. higher.
USP, gran., dms lb. .26 - —
Sulfide, pure, bgs., c.l., dlvd lb. .2530 - —
Undecylenate, dms lb. 2.00 - —
Yellow (see Yellow, zinc).
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 - —
bbls., c.l., works 100 lbs. 10.85 - —
l.c.l., works 100 lbs. 11.35 - —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l. lb. .25½ - —
l.c.l. lb. .26 - —
Zircon (G), gran., bgs., c.l., works, lb. .03½ - —
5 tons to c.l., works lb. .03¾ - —
1 ton to 9,999-lb. lots, works, lb. .04 - —
smaller lots, works lb. .06½ - —
milled, bgs., c.l., works lb. .04½ - —
5 tons to c.l., works lb. .04⅝ - —
1 ton to 9,999-lb. lots, works, lb. .04⅝ - —
500-1,999-lb. lots, works lb. .07½ - —
Zircon (G) in barrels, 1c. higher.
Zirconium acetate, 13% com., ZrO_2, c.l., 30,000 lbs. minimum, works lb. .23 - —
Hydride, cns., works lb. 7.00 - 8.45
Nitrate, dms., ex whse lb. 4.50 - 7.00
Oxide, 92½-99%, white grd., bbls., or bgs., works lb. 1.50 - —
lump, electric-fused, bgs., lump, electric-fused, bgs., c.l., works lb. .44 - —
5-ton lots, works lb. 44½ - —
1 ton to 9,999-lb. lots, lbs., works lb. 45 - —
CP, white grd., bbls. or bgs., works lb. 1.50 - —
lump, electric fused, bags, 500 to 1,999-lb. lots, works lb. 45½ - —
smaller lots, works, lb. 48 - —
milled, electric-fused, bgs., c.l., works lb. .59 - —
5-ton lots, works lb. .59½ - —
1 ton to 9,999-lb. lots, works lb. .60 - —
500 to 1,999-lb. lots, works lb. .60½ - —
smaller lots, works, lb. .63 - —
Oxychloride, cryst., ctns., 5-ton lots, works lb. .35½ - —

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Air Pollution Studies

President Eisenhower has asked for more funds for direct federal study of the many aspects of air pollution, which he quite aptly called a problem of growing national importance (OPD, January 21, page 67). A bill has been introduced in the legislature of the State of New York, purposed to create and authorize an agency to control air pollution on a statewide basis, complementary to the service now operative in the five counties comprised by the City of New York. The city commission of Perth Amboy, New Jersey, has launched a proposal to create a bureau of air pollution and a special supplementary board of advisers and appeal. A magistrate in Newark, New Jersey, imposing the maximum fine of $50 on an industrial offender and each of four scavengers and others who had burned smoky open fires, urged that the city's industrial sanitation chief go along with a move to have the fine increased to $500.

Public hearings on the New York project are now under way in a series of cities. The proposed agency would have eleven members. The state commissioner of health would be its chairman. The commissioners of agriculture and markets, commerce, conservation, and labor would be members. The other six members would be appointed by the governor—five of them from nominees submitted by industrial and municipal organizations in the state; the sixth as his choice to represent the public. Public hearings on the Perth Amboy proposal will be held February 6. It would provide maximum penalties of thirty days in jail or a fine of $200, or both for "failure to take necessary precautions against the permeation of noxious gases, smoke, etc., into the atmosphere." Available information does not indicate what course would be followed by the mayor in naming the five members of the advisory board.

Industry has done a great deal to reduce its share of the contributions to the pollution of the atmosphere. There is still convincing evidence that it has not done enough. There will be still more to be done, along entirely new lines, as the development of nuclear reactions and associated processes progresses.

Competent commenters are largely of the opinion that the combustion of fuels is still a major, if not the predominant, contributor to air pollution. If one includes in that category the combustion of gasoline or diesel oil in the propulsion of motor vehicles, their conclusion is quite sound. The Newark magistrate did not make that point when he spoke of the discomfort and hazard of smoke-drifted highways.

The prevention of air pollution in terms of smoke rather than of noxious fumes, by open fires is almost impossible. That is not an industrial problem. It can be lessened by application of the most effective means of combatting smokestack contributions to the formation of smog. That is the overcoming, mainly with some sort of a breeze-maker, of the atmospheric static which prevents adequate ascending dispersion of smoke or fumes. A newer means of minimizing the noxious effects of flue gases is based on washing stack effluents with ammonia.

Whatever its contribution to the lessening of air pollution, every industrial group should be properly represented directly in every movement in that direction at all levels, from local to national, complementary to such representation as it may have—and should have—by way of general organization. The air pollution problem is one of the human relations that are basic to public relations. Promotion of those relations is a prime duty and responsibility of industry. There is much helpful information in that direction in the 1956 report of the president of the Air Pollution Foundation.

The Middle East Problem

It is only within the past fortnight that there has been available to observers of world affairs a definite basis on which to construct a generally applicable evaluation of the Eisenhower doctrine with reference to the Middle East. Earlier, the only starting place was an acceptance in greater or less degree of the assumptions, expectations, and fears by which the President evidently had been motivated. That, of course, opened many channels of approach for any undertaking of an evaluation. None of the official supporting of the doctrine, including that of the Secretary of State, contributed anything toward the facilitating of the selecting of a channel, or channels, that held even a promise of a convincing—to say nothing of a positive—finding.

Solution of the problem has not been made any easier by the development of a definite basis; because what has been developed is the fact that at least a large majority, if not all, of the Middle Eastern nations do not accept the doctrine, do not want external interference of any sort from any source in what they consider their own affairs, with which they are fully capable to deal.

Of course, that attitude does not fit in with the widely held concept of the international status of the Suez Canal, especially wherein that concept reaches beyond the scope of the treaty that set up some such sort of status, but did not deal with international enmities which have existed for at least five thousand years.

It must be expected that the congressional handling of the Eisenhower doctrine is going to be rough—and not only with respect of its potential consequences in a military sense. There is a large and growing tendency in congressional and other circles to express and impress beliefs, which antedate the pronouncement of the Eisenhower doctrine, even the muss about Suez, that this country is not governmentally equipped efficiently to take on the task of world leadership, even in areas where that does not necessitate dealing with mutiny in the ranks.

To the realistic, practical thinker, it has become more than ever clear that the Middle East problem should have been—and still should be—dealt with economically, not politically. Many of them have all along held the belief that the Suez problem was a business one. They know that, especially in a military sense, the mussing in that respect has hurt business far more than it has politics. They feel that politics should get out of the way and give business a chance to restore to the proper service of the wanting world the existing and potential resources of the Middle East—especially that estimated 65 percent of the petroleum resources of the "free" world, roadblocks to which are costing consumers in this country plenty.

In view of the political stalemate set up by the action of the conference of the Arab states, business should seek full reliable information on the text of the pronouncement and on all stages of its genesis. It appears that there has been no rejection of proposals of economic aid as such; although it has been made quite clear that the desires in that connection have to do with development of natural resources technically and commercially, rather than by way of financial aid. For that reason, United States business has a further big opportunity to take the Middle East problem out of politics. It should endeavor to meet that opportunity fully and promptly.

A Puzzle in Foreign Relations

The fiscal 1957 program of the Office of International Trade Fairs, Department of Commerce, was recently increased to twenty-two when the agency accepted an invitation from the Polish chamber of foreign trade to participate in the international fair in Poznan, scheduled for June 23. That was before Poland's new regime joined the leaders of red China in a statement criticizing the foreign policy of the United States. In the recent one-lane "election" in Poland, the new regime got something like a 70-percent backing.

The first question that looms up from that series of events has to do with the wisdom—from any point of view—of this country's plan to make its first official appearance in a trade fair "behind the iron curtain." That question cannot be answered until the ponderer has decided whether Poland really is behind that barrier. The recently well-supported party chief in that country has defied complete Russian domination for some months. And in the pronouncement that came out of the recent conference of the Polish and Chinese leaders there was nothing in keeping with the customary—some say compulsory—reference to Russia as the high and mighty leader of the communist world. The Polish leader's "socialist" system is based on a decentralized economy with some measure of personal freedom, at least in thought, and some right to vote—along directed, but not wholly dictated, lines.

So; there it is. Should the United States officially participate in a trade fair sponsored by an old-time friendly people now under a mixed-up new-time not wholly friendly government? In a now popular certain sense of the term, that member of the world's governments is a "neutral." Would it be pushed a bit Westerly by US participation in its fair? Behind those questions is this:—Why was the United States invited to participate?

Whatever the answer to those questions, there would seem to be a desirable opportunity for American business in being represented among the exhibitors at Poznan in the coming summer. The OITF contract is for 30,000 square-feet of space, 18,000 of which will be occupied by the central exhibit. Individual private exhibits are to be officially encouraged, especially in consumer products. There were exhibits from thirty-six countries in the Poznan fair last year. It can, therefore, be seen that, if US exhibitors want to make a good, profitable impression, they have a deal of studying and planning to do.

Washington Talks It Over

Oil Industry Appears to Be Due for Another Inquiry—This One on the Oil-for-Europe Program

By Ralph L. Cherry
Chief, OPD Washington Bureau

The oil industry is never without its problems and threats of investigations at the hands of congress, and this year they seem to be mounting rapidly. Before many more days have passed, the industry can expect to find itself in the center of a full-fledged inquiry into the reasons for recent price increases and its manner of handling the oil-for-Europe program.

A joint committee of the senate interior and judiciary committees is setting up the stage for the investigation, with Sen. Joseph O'Mahoney of Wyoming slated to serve as chairman. Recent increases in gasoline prices in face of heavier stocks than a year ago are the chief complaint of the senators.

Another point of interest to the committee is why are the state allowables (Texas) being cut back when the industry is being called upon to step up its shipments to Europe to close the gap in supplies created by the Middle East situation. Some members are wondering if an investigation of the manner in which the oil states compact is being administered would not be a good thing to have after all.

This was proposed a year ago when the compact came up for renewal. The senate suggested that it be made by the Justice department to see whether the compact was being used in such a manner as to violate the antitrust laws, but when the department said that such an inquiry would cost about $900,000, demands promptly subsided. In light of the present situation, however, there is some talk of reviving the suggested inquiry.

'Dangerous Drug Display'

The California State Board of Pharmacy is reported to be considering a plan to distribute about 2,200 "dangerous drug" display boards around the state to its law enforcement agencies, hospitals, coroners' offices, and similar organizations. The display boards presumably would contain one tablet or capsul of each size, brand, formula, or type of barbiturate or amphetamine product on the market.

It is not quite clear what the purpose of the project might be, but if it is the intention to provide a means of readily identifying dosage forms of these drugs found in the possession of ill persons, or other individuals coming to the attention of government officials, some of the drug manufacturers believe the state should give it a little more consideration before acting.

To prepare 2,200 boards of this type, each containing one sample of each brand, size, and dosage form of each manufacturer's product, would require hundreds of thousands of tablets and capsules of prescription drugs. And with new brands, formulas, and dosage forms constantly being introduced, it would be a near impossible task to keep the boards up-to-date.

Medical science has made some remarkable advances in recent years, but it hasn't yet reached the point where one can rely on the appearance and size of tablets, found in the possession of an ill person, to determine proper treatment.

SBA Booming Antitrust Unit

Small Business Administration is doing a selling job for the antitrust division of the Department of Justice. SBA has just gotten out a pamphlet citing examples of some of the indirect assistance rendered to little business by the division, and invited small firms to report any antitrust violations to the division.

The pamphlet is No. 17 in a series of Small Marketers Aids being issued by SBA and is devoted solely to telling how the Department of Justice helps small business. Some of the recent court cases cited involved film processing, tabulating machines, movie exhibition, gas stations, grocery stores, and many other goods and services.

Eight specific practices that constitute violations of the law are listed and small firms are asked to be on the lookout for them among their competitors or suppliers. SBA doesn't guarantee speedy and effective results, but sets forth suggestions on how to bring them to the attention of the Justice department in the most effective manner.

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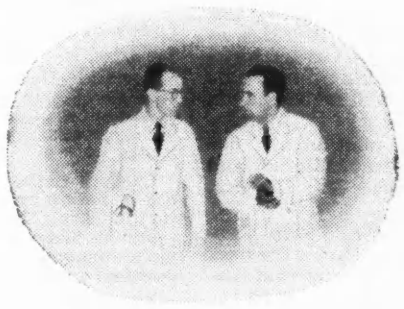
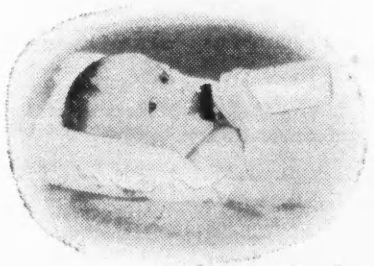


Increasing interest among MD's
Continued widespread interest in the pharmaceutical industry and the medical profession reaches new heights with release of information at the symposium on "Newer Vitamins" held under the auspices of the National Vitamin Foundation at Vanderbilt University. The importance of pyridoxine in the field of nutrition is emphasized.

Metabolic imbalance in pregnancy
Its particular role in the metabolism of tryptophane and other amino acids may be significant in correcting certain metabolic imbalances known to exist in some pregnancies.



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4059

Heavy Chemicals

Platinum declined last week owing to a more plentiful supply position. Markets for most of the nonferrous metals continued quiet, with copper, lead and zinc on the weak side. Tin and mercury seemed a little stronger. Demand for the latter metal appeared to have suffered during 1956 because of less inquiry for use in the manufacture of mercury cell caustic soda. The heavy chemicals market last week was subject generally from hand to mouth buying.

Producers pointed out that tight buying, normally anticipated only in small volume items, or materials where storage problems are a factor, has pervaded the entire market.

Close - to - the - vest purchasing has spread to such heavy bulk materials as soda ash, caustic soda, caustic potash and the mineral acids. Gone are the days when material was ordered ninety days in advance, producers indicated.

The chlorine market softened rather suddenly last week, for the first time in several months. Producers were reported out looking for new business, a position they were not able to take only a few weeks ago.

One bright spot in the picture was calcium chloride, large quantities of which continued to move out for highway ice control. Producing plants were reported about three days behind on orders.

Barium carbonate went higher, due to increased costs of raw materials and processing. The increase was the first since October 1, 1955.

The American Paper and Pulp Association reported production for the week ended January 19 at 95.5 percent of theoretical capacity, as compared with the revised figure of 96.4 percent for the previous week, and 101.6 percent for the corresponding week of last year.

Acid, Chromic—Demand from the plating industry remained active, in view of pressing needs caused by heavy automotive production. Prices held without change.

Acid, Hydrochloric—The southwest continued to witness a firmer market, brought about by price increases and adjustments in the Texas-Kansas-Arkansas-Louisiana area.

Elsewhere in the country, with the possible exception of the New York metropolitan area, prices were regarded as firm. Around New York, however, plentiful supplies served to keep the market unstable.

Acid, Hydrofluoric—HF inquiry by the steel industry, particularly for use in the manufacture of stainless steel, helped to keep the market strong last week. Other demands were also reported active.

Acid, Nitric—Steel and chemical use wielded a firm influence, and large volumes moved to consumers throughout the end use pattern. Prices continued steady and unchanged.

Acid, Phosphoric—Production of phosphoric acid has shown a considerable decline from levels reached early in the fall. The drop has been ascribed primarily to fading seasonal interest for use in fertilizers.

Acid, Sulfuric—Steel and rayon, as well as petroleum, pigments, and other chemical applications were all in the market in sizable volume last week. Prices generally were firm, the New York area reporting some instances of shading.

Steel output last week was estimated at 2,496,000 tons, or 97.5 percent of capacity, as against 2,467,000 tons the previous week, or 96.4 percent of capacity, according to the American Iron & Steel Institute. Output for the corresponding period last year was 2,472,000 tons, or 100.4 percent of 1956 capacity.

Aluminum Fluoride—Prices held without change. The next price change is expected to come next August, when the aluminum industry again enters negotiations with labor.

The current market was stable. It was pointed out that most of the aluminum fluoride produced is consumed within the aluminum industry, and that little is sold on outside markets.

Aluminum Hydrate—Trihydrate was reported moving to the ceramics industry in good volume. Prices held without change. Supplies were adequate to cover immediate needs.

Barium Carbonate—Price of barium carbonate has been increased by $4 per ton across the board. Material was quoted last week at $104 per ton, bags, carlots, f.o.b. works, and $114 per ton, smaller lots, same basis.

Price Trends

Advanced

Barium carbonate, $4 per ton.
Potassium stannate, ½c. per lb.
Sodium stannate, 6/10c. per lb.
Stannic chloride, ½c. per lb.
Stannous chloride, anhyd, 6/10c. per lb.
hydrous cryst., ½c. per lb.
Sulfate, ½c. per lb.
Tin, 1½c. per lb.

Reduced

Platinum, $5 per oz.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 27, 1956
103.84	103.86	103.35	101.16

For Current Prices see Page 9

Bromine—Demand for this halogen was steady, with little in the way of new developments. Quotations were unchanged, with supplies available for prompt shipment.

Calcium Chloride—Buying interest for use in ice control on highways continued to run strong last week, and producers reported that in some localities, plants were running two to three days behind schedule on shipments.

The recent cold snap which prevailed over much of the northeast and midwest sent replacement demand to a high level, which was maintained for most of the week.

Chlorine—There were signs of a slightly easier market last week. While some producers reported that they were moving all they could make, others indicted that buying pressure had eased considerably since the period preceding the holidays.

Ferric Chloride—This market was quiet, with no unusual recent developments having taken place. Prices were steady and unchanged.

Magnesium Sulfate—Domestic sources reported that business has shown a substantial increase since the first of the year, despite competition from imported epsom salts.

Manganese Dioxide—While the price of Moroccan and Gold Coast ore continued at a high level, sellers here felt that prices would decline once the Suez Canal is reopened.

The Suez crisis has caused considerable tightening of shipping space, as well as sharp increases in transoceanic freight rates, resulting only recently in a $39.50 per ton increase in Gold Coast ore.

Potash, Caustic—The market continued to revive, shaking off the effects of the year-end slump. Demand was active all through the end use pattern.

It was noted that markets for this material, as well as other heavy bulk items in the inorganic chemicals market, has become chiefly a hand-to-mouth affair during the last several months.

It was pointed out that not too long ago, consumers would order materials up to ninety days in advance on some materials. Since that time, there has been a shifting toward shorter and shorter commitments.

This position has been amplified in recent weeks by consumers who, for inventory purposes, kept stocks on hand at the and of December as low as possible.

Since then, while there has been an incease in demand to cover requirements, buying is said to have remained fairly close to the vest.

Potassium Carbonate—Demand for use in the specialty glass industry continued about steady. Television tube manufacture, while not as heavy as previously, accounted for a sizable portion of consumption.

Demand from the phosphate industry was about unchanged, although it was indicated that interest from synthetic detergent manufacturers was slowly expanding.

Soda Ash—Buying interest for light and dense ash continued to pick up following the year-end slump. Dense ash sales to the glass industry have shown steady improvement.

Inquiry for light ash from aluminum, paper and phosphate makers, while still

Heavy Chemicals

chiefly on a hand-to-mouth basis, was also showing a good revival.

Soda, Caustic—Buying for use in rayon and film, chemicals, paper and pulp, petroleum and other industries was in moderate volume for immediate needs last week.

It was indicated that in the period since the first of the year, purchases have been largely on a hand-to-mouth basis, although material has been moving out in good volume.

This situation was said to be nothing new, in that tight buying has been the practice for some time now with many consumers. It was felt that the practice of buying material up to ninety days in advance was rapidly fading from the market picture.

There was plenty of material around which was readily available for prompt delivery. This was thought mainly due to the extremely high rate of chlorine operations during the past few months.

Tin Salts—Potassium stannate advanced to 78.9c. to 86.1c. per pound; sodium stannate, 64.8c. to 70.7c.; stannic chloride, 80.4c. to 81.4c.; anhydrous stannous chloride, 93.3c. to $1.427; hydrous crystals, 81½c. to 82½c.; and sulfate, $1.067 to $1.087.

Zinc Sulfate—Demand for 36 percent sulfate held up well last week. Inquiry was reported good for most of 1956. Sales to the rayon industry, while not as heavy as during 1955, were still considered satisfactory by producers.

Nonferrous Metals

Aluminum—December production rose to 297,149,086 pounds from 290,162,159 pounds in November, according to the Aluminum Association.

Total output for 1956 rose to a record 3,358,861,859 pounds from the previous record output in 1955 of 3,131,439,251 pounds. The fourth quarter of 1956 set a quarterly record, of 885,561,928 pounds.

Copper—Metal continued quiet, with demand in this country limited to small lot purchases for immediate needs. Primary producers' electrolytic continued unchanged at 36c. per pound, delivered.

Dull demand has brought custom smelters' prices down to 35c. for electrolytic, delivered, and 34½c. to 34¾c. per pound for export, f.a.s. US ports.

Mercury—The market hovered around $255 to $257 per 76-pound flask, spot, last week. Some business in small lots was reported transacted at prices ranging from $257 to $258.

Buying interest was generally on the sidelines for mercury in large quantities. Despite the dull market for primary metal, mercurial compounds were reported doing well.

Nickel—Price, which was increased December 6 to 74c. per pound, continued unchanged.

Platinum—Metal backed off last week due to an increase in the supply. Declines of $5 per ounce were registered, and platinum was newly quoted at $98 to $101 per ounce, spot.

Silver—Bullion remained unchanged, quoted at 91⅜c. per troy ounce, spot, on Friday.

Tin—Market was firmer during the week. Straits metal climbed to $1.03, spot.

The Straits-New York Conference announced last week that effective February 1, the contract freight rate from Malayan ports to Atlantic and Gulf ports will be increased to $68 per long ton. The current rate is $62.

Zinc—The following figures, in tons, indicate total slab zinc smelter output and stocks, according to American Zinc Institute.

Production	*December*	*November*
Special high grade	32,589	30,753
High grade	13,948	13,776
Intermediate	4,867	5,597
Prime western	46,830	41,682
Total	98,234	91,808

Stocks	*December*	*November*
Special high grade	22,234	22,864
High grade	4,477	5,192
Intermediate	2,025	1,225
Prime western	39,896	40,904
Total	68,632	70,185

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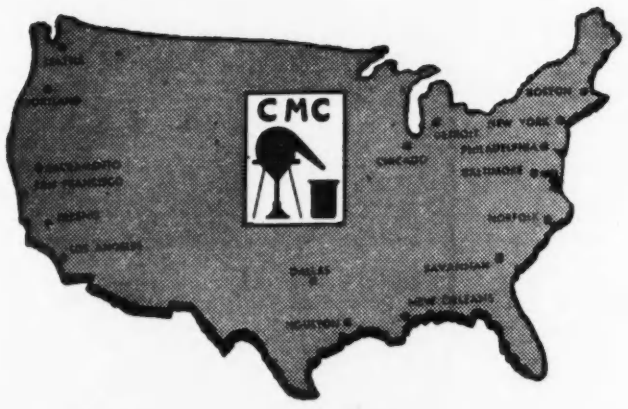

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Castor World Production Changes Little in 1956

Foreign Agricultural Service reported last week that world production of castor beans in 1956 was at about the same level as 1955. Preliminary estimates of the FAS placed that crop at 523,000 short tons compared with the 1955 revised estimate of 522,000 tons and the 1953 record output of 567,000 tons.

The indicated decline from 1955 in Brazil's crop was offset by slight increases in India and Mexico. Insufficient information is available for the Soviet Union and Manchuria to estimate any material change in recent years.

United States production was only about 2,500 tons reflecting discontinuance of the government's guaranteed price program. Mexico produced about 7,000 tons or three times the 1955 outturn.

Roughly 50 to 60 percent of the estimated world production of castor beans originates in Brazil and India.

Production of castor beans grown alone in India in 1956 is reported officially at 141,120 tons, only slightly larger than the 1955 crop but roughly one-fifth more than the fairly constant outturn of the four previous years (1951-54).

The bulk of the Indian castor crop is crushed for oil and a substantial portion of the oil is exported. No significant change in acreage and production of castor beans is forecast for 1957.

Unofficial sources estimate Brazil's 1956 castor bean harvest at 168,200 tons compared with 175,700 tons in 1955. These figures are somewhat lower than official estimates of 185,900 tons in 1956 and 180,775 the previous year.

The unofficial estimate of a decline in 1956 was based on reports that the crop in the northeast had been reduced by abnormally dry conditions and in Sao Paulo by smaller plantings and unseasonable rains early in the year.

Production in 1957 is expected to increase substantially from last year's level, principally because of higher prices. Rainfall and other climatic conditions will, of course, be important factors in the actual volume of increase.

Brazil's exports of castor beans in recent years have been far below the annual volume of 100,000 to 150,000 tons exported in the prewar period and postwar years through 1950. Oil exports, however, have increased significantly and total bean and oil exports in the years 1953-55 averaged over 100,000 tons bean equivalent basis.

Chemicals Will

—Continued from page 3

mounting labor, raw material, transportation, and packaging costs, as well as advancing capital equipment and research charges.

It is expected that employment in the chemical field will remain fairly stable during the first half of 1957 with the monthly average for the year possibly 2 percent higher than 1956's peak of about 833,200, Mr. Johnson's report said.

Weekly wages earned by 550,400 chemical production workers during November, 1956, averaged $87.97, almost 7 percent higher than the average weekly wage for all of 1955. No marked changes in current earning rates are anticipated during the first half of 1957.

More Funds for Research

With additional emphasis placed on the application of nuclear energy and irradiation to industrial processes and products, more funds will be expended on chemical research and development in 1957 than ever before, probably about $475 million by the chemical industry alone, the report added.

The outlook for a number of important specific chemicals follows as illustrative of the character of the industry in 1957:

Output of elemental sulfur and gross sulfuric acid in 1957 is expected to exceed 7.25 million long tons and 16 million short tons, respectively.

It is anticipated that there will be increased demand in 1957 for chlorine and the alkalis.

Continued growth and expansion of the production and use of phosphorus and phosphatic chemicals is expected in 1957.

Fertilizer activity in the 1956-57 fertilizer year will probably show little marked change from that in the preceding year. Although it is expected that the slight upward trend in anhydrous ammonia production will continue into 1957, due largely to new capacity, many producers may find their markets spread a little thinner.

Benzene output, which closed the 1956 year some 8 percent higher than volume in 1955, is expected to increase further in 1957 by about 4 percent.

Another record-breaking year is forecast for the plastics industry in 1957 with output of plastics materials and resins expected to reach 4.2 billion pounds, about 5 percent above anticipated 1956 volume.

There appear to be good prospects in 1957 that the paint, varnish, and lacquer industry will establish a new sales peak, possibly in excess of $2 billion.

Concerning the rubber industry, the report said:

Capital equipment expenditures by rubber product manufacturers in 1957 are expected to establish a new record in excess of $200 million.

In line with increasing rubber product output, 1957 production will probably average close to the previous peak in 1955.

US new rubber consumption in 1957 is expected to reach a level of approximately 1,510,000 long tons, about 1.3 percent short of the 1955 all-time high of 1,530,000 tons.

Obituaries

Dr. Fred R. Beaudette

Dr. Fred R. Beaudette, chairman of the animal pathology department at Rutgers College of Agriculture, New Brunswick, N. J., and poultry disease scientist, died January 17 in New York. He was fifty-nine years old.

Mr. Beaudette's most notable achievements were in the development of poultry vaccines for Newcastle disease and laryngotracheitis. During World War II, he developed a form of fowl pox vaccine, which was partly responsible for research leading to the development of substitutes for quinine to combat malaria.

Alexander W. Whiteford

Alexander W. Whiteford, retired executive of Union Carbide & Carbon Corporation, New York, died January 23 in Bronxville, N. Y. He was eighty-three years old.

In 1911, Mr. Whiteford was associated with Oxweld Railroad Service Company, and later with Haynes Stellite Company. Both companies later became divisions of Union Carbide.

Oscar A. Saar, former president of American Molasses Company, died January 17 in West Hempstead, N. Y. He was sixty-three years old.

Charles W. Stewart, retired president of American Bitumuls & Asphalt Company of San Francisco, died January 22 in Providence, R. I. He was sixty-nine years old.

Strong, Cobb Men Shift

John F. O'Brien has been appointed production manager of Strong, Cobb & Co., Cleveland, Ohio. Dr. Henry S. Godshall, assistant vice-president, has retired.

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FDA Stands Pat on Additives Bill

—Continued from page 5

tion is enacted in which to complete such testing as is necessary on chemical additives then in use which have not received informal clearance."

Usefulness of a Chemical

As to whether evidence should be submitted on the usefulness of a chemical before it is permitted in food, Mr. Harvey pointed out that some people think "that the establishment of a safe level at which the chemical may be added should be sufficient to justify inclusion of the compound in the food supply."

On the other hand, he noted, there are some "who think no poison should be tolerated in the food supply unless it is necessary or cannot be avoided."

He emphasized that FDA is concerned only about the inclusion of "active poisons" in the food supply. The agency, he said, has "no reservations about the addition of completely harmless chemicals, whether or not they have functional value."

To determine the safety of an additive under an administrative type of procedure would be "grossly inadequate," contended John A. Gosnell, Washington, D. C., attorney. He pointed out that very important private rights are involved in such a determination.

"The new product under consideration," he said, "would generally be the result of research costing many thousands of dollars. The commercial stake involved frequently may be considerable.

What the Real Issue Is

"The issue is safety as determined by government on the basis of research performed by industry. And how is the issue proposed to be resolved? By the procedure relating to the promulgation of regulations.

"But is this action in fact the development of a general rule for future application? This determination primarily affects the rights of a single applicant, and very important rights. It is regulatory only in a nominal sense.

"The rights of research are equally as important to the applicant and to society as the private rights and public policy considerations involved in the issuance of patents, a procedure protected by de novo judicial scrutiny of the facts involved."

Water-Soluble Resin Made In Tonnage Lots by Glyco

A new resin, dimethyl hydantoin formaldehyde (DMHF) is being produced by Glyco Products Company, New York. The resin, available in tonnage quantities, is water-soluble, water-white, and is said to have high gloss, be adhesive, will not ferment or decompose, and it is resistant to oils, gasoline and many aromatics.

According to Glyco, the resin is currently being used for special textile sizing and paper coating. The company recommends its use in temporary metal coatings; lining drums or rubber hose carrying oils; water paints; binders for foundry molding sand, pigments, abrasives, metal powders, and other applications.

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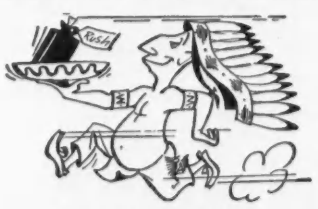

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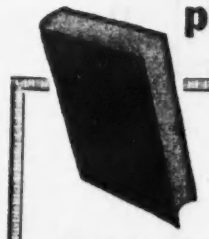

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Textile, Leather Chemicals

Consumers have gradually stepped up demand for textile and leather chemicals. Business was fairly active for prompt delivery, while withdrawals against former orders continued at a good pace. Chestnut extract was higher and recently advanced fractionally as a result of higher ocean freight rates. All materials remained steady at current quotations with the exception of flake egg albumin which was under selling pressure and reduced 5 cents per pound in some quarters. Egg yolk, however, was quotably unchanged and well held. Steadier tone prevailed in replacements of Siamese tapioca flour and sago flour as a result of increased ocean freight rates effective February 1, which will automatically raise quotations about 20 cents per 100 pounds for February forward shipments. The cost of imported potato starch also will advance 8 cents per 100 pounds, February 1 due to increased ocean rates. Domestic potato starch remained in a firm position in Maine and Idaho. Production was reported at capacity and readily absorbed against current contracts. Corn starch and dextrin were in good request for actual needs and were well held at the recent advance.

Consuming demand for tanning materials continued spotty as tanners operated in a hand to mouth manner. Myrobalans were easier and lower for genuine J1 and Bombay, while crushed were unchanged. Chestnut extract was firm and higher, with other materials quotably unchanged and fairly steady.

Preliminary estimates of shoe output in December was approximately 42 million pairs, which would be 7.8 percent below production in December, 1955, was indicated by Tanners Council. The decline in production last month was apparently due to three or four less working days in the month. It is estimated that output per average working day in December was equal to or slightly higher than in December, 1955.

Estimate for January based on manufacturers' schedules indicates a production for the month of approximately 50 million pairs. This would represent a decline of 5.9 percent from January, 1956, when output totaled 53,139,000 pairs. For the total year 1956, shoe production totaled approximately 586,182,000 pairs, an increase of 1.6 percent from 1955. Output in 1955 was 576,973,000 pairs; 1954, 523,996,000 pairs and 1953, 532,031,000 pairs.

Price Trends

Advanced
Chestnut, ex., solid, 60%, 0.205c. per lb.
powder, 70%, 0.225c. per lb.

Reduced
Egg albumin, flake, 5c. per lb.
Myrobalans, gen. J 1, $2 per ton.
Bombay, $3 per ton.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 27, 1956
108.46	108.95	108.55	105.46

For Current Prices see Page 9

Chemicals

Bichromates—Conditions in this market were unchanged and firm. Withdrawals against contracts continued in good volume. Spot demand was moderate. All grades were maintained at current quotations.

Sodium Acetate—Business was reported spotty for actual needs. Prices were without change.

Sodium Hydrosulfite—Consuming demand was fairly active for prompt requirements. Prices were well held at current levels.

Sulfonated Oils—Moderate demand was noted for all grades. Prices were without change and steady.

Sizing Materials

Corn Dextrin—Consumers absorbed sizable lots for prompt needs. Market was steady at the recent advance due to higher freight rates. Gum was quoted at $9.33 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.07; dark canary, $9.17 and white, $8.91, same basis. Smaller lots were 15c. higher.

Corn Starch—Trading was reported fairly active for prompt delivery. Prices were steady at the recent advance. Pearl was quoted at $7.32 per 100 pounds, paper bags, carlots, New York basis and powder, $7.44, same basis. Less carlots were 15c. higher. Visible corn supply increased 920,000 bushels to 70,329,000 bushels for the week ended January 18, against 48,338,000 for the corresponding week last year, it was reported by the Chicago Board of Trade.

Egg Albumin—Market was under selling pressure and flake was reduced 5c. to $1.54 to $1.56 per pound, and powder $1.58 to $1.60 per pound, spot, as to quantity. Trading was reported spotty for nearby delivery. Technical remained steady and unchanged at $1.08 to $1.10 per pound, according to quantity.

Egg Yolk—This market did not reflect the weakness of albumin and quotations were maintained at former levels. Business was fair, chiefly for actual needs. Prices were unchanged at $1.05 to $1.07 per pound, spot as to quantity.

Potato Starch—Firm tone featured this market. Prices were unchanged and well held. Carlots were maintained at 6¼c. per pound, f.o.b. mills Maine, prompt shipment, with business reported thereat. Offers for forward delivery continued limited. Withdrawals against contracts continued to move in good volume. The Idaho market also remained steady at 6¼c., carlots mills and 5¾c. for shipment to eastern points. Spot stocks were in fair request at 8¼c. to 9¼c. per pound, exwarehouse, depending upon quantity.

Tapioca Flour—While Siamese grades were unchanged for January shipment, prices will automatically increase about 20c. per 100 pounds, February 1 because of higher ocean freight rates effective on that date. Medium grade was quoted at 5.35c. per pound, exdock, carlots, January shipment and grade A at 5.85c., same basis. Brazilian flour for shipment remained quiet and nominal at 9¾c. to 10c. per pound, carlots, exdock.

Tanning Materials

Hide exports for November amounted to 450,000 pieces, compared with 444,000 in October and 677,000, November 1955. Shipments for the first eleven months of 1956 totaled 4,537,000 against 5,276,000 for the same period in 1955.

Chestnut Extract—Trading was spotty. Market was steady at recent fractional price advance for all grades. Solid extract guaranteed 60 percent was held at 9.33c. per pound, carlots, exdock, plus duty, prompt shipment and powdered, 70 percent, 10.85c., same basis.

Cutch—Shipments were quotably unchanged at 8½c. per pound, carlots, exdock, plus duty. Buying interest was fairly active. Offers were reported light.

Divi Divi—Offers of new crop material were limited and closely held at $80. per ton, exdock, with sales reported thereat.

Mangrove Bark—Business was reported slow. Offers for shipment were quite liberal. African bark was quoted at $62 per ton, ex-dock, prompt shipment; Colombian, $58 per ton, and Ecuadorian, $55, same basis.

Myrobalans—This market was unsettled due to increased offerings and quiet demand. Genuine J1 was lower at $61 to $62 per ton, exdock, prompt shipment and Bombay at $58 to $59 per ton. Crushed were unchanged at $79 to $80, same basis.

Quebracho Extract—Consuming interest was reported moderate and confined to prompt shipment. Market was quotably unchanged and steady. Solid ordinary guaranteed 63 percent tannin was quoted at 11 21/32c. per pound, ex-dock, plus duty and clarified 64 percent 12 63/64c., same basis.

Wattle — This market was without change. Shipments were maintained at prevailing quotations. Buying interest was moderate chiefly for nearby delivery. Fair average bark quoted at $95 to $96 per ton, exdock, prompt shipment and merchantable at $91 to $92. East African extract was unchanged at 9¾c., and South African 10c. per pound, carlots, exdock, plus duty.

Agricultural Chemicals

A fuel oil advance last week portended further advances for phosphate rock. The new fuel oil listing of $3.07 per barrel has followed on the heels of the December advance to $2.82. Current phosphate rock prices reflected the December oil advance in first of the year price hikes. Producers on spot suggested that another rock price shift might take place early in February. Animal proteins reflected a firm winter sales period with advances in blood and tankage. The price shifts were made in both Chicago and New York. The present strength is expected to continue for some time. In the pesticides market p-Dichlorobenzene appeared to be suffering the buffets of relatively rigorous market price shifts. Dealers suggested that the price declines reflected no particular market condition but rather the shiftings in position of various producers.

Price Trends

Advanced

Blood, New York, 25c. per unit ton.
Chicago, 25c. per unit ton.
Tankage, New York, 25c. per unit ton.
Chicago, 50c. per unit ton.

Reduced

None.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 27, 1956
109.62	109.30	108.68	110.78

For Current Prices see Page 9

Animal and Plant Foods

Anhydrous Ammonia—The market for this material as well as for most of the other fertilizers in the market, continued to show a slack approach to the seasonal buying market. This is in keeping with the prophesied late market that most authorities suggested would be the case. Production has picked up but the sales lag may bring it back a few degrees in order to keep the already heavy stocks from getting to mountainous. There is still some expectation of further foreign buying through government funds, though sales adong that line to date have been rather disappointing with the American market getting less than the hoped-for amount of business.

Animal Proteins—Demand continued on a relatively good level last week for several commodities in this market, dealers here reported. The movement is resultant of feed buying during the cold winter period. Blood advanced 25c. across the board in both Chicago and New York. The new listings are $6.25 and $5.50, respectively. Tankage also showed good strength in both areas. The new listings of $5.25 for New York and $6.50 for Chicago are 25c. and 50c. advances, respectively. In other areas of the market, the strength was reflected but not to the degree felt in blood and tankage.

Phosphate—An advance in the price of fuel oil to $3.07 is expected to bring a further advance in the price of phosphate rock, dealers here reported last week The fuel oil price, which went into effect January 19, will probably be followed with advanced phosphate rock prices at the beginning of February. At present, the prices are based upon a $2.82 fuel oil listing. This oil rise took place on December 10. The listings for phosphate rock at present are:

Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines	long-ton.	5.115 - —
70-68%, b.p.l., c.l., same basis	long-ton.	5.515 - —
72-70%, b.p.l., c.l., same basis	long-ton.	6.165 - —
75-74%, b.p.l., c.l., same basis	long-ton.	7.165 - —
78-76%, b.p.l., c.l., same basis	long-ton.	8.165 - —

United States November production of superphosphate and other phosphate fertilizers amounted to 207,612 short tons (100 percent A.P.A.) compared with the October, 1956, output of 207,107 short tons. Shipments of superphosphate and other phosphatic fertilizers during the month totaled 145,453 tons, or a decrease of 2 percent from the volume shipped during the previous month. Stocks on hand during November increased 2 percent and the November 30, 1956, stocks were 20 percent higher than the quantities held by phosphatic material producers on November 30, 1955.

Pesticides

Chemical pesticide sales for the year 1956 have been estimated at $250 million at the basic producer's level, a new high for the industry. This is a 25 percent advancement over the 1955 producer's sales of $200 million, according to the National Agricultural Chemicals Association.

Sales during the year, according to information, were boosted by a variety of developments including a series of heavy insect infestations, particularly in the south and southwest, and a greater use of pesticide chemicals in public health programs throughout the world. Markets for pesticides expanded in four different directions during the year: 1) the farm market where more farmers are using pest control chemicals to reduce per unit cost of production; 2) the home garden market; 3) increased use of insecticides in public health programs, and 4) increasing use of chemicals to control weeds, brush and insects and turf diseases alongside roadsides of the nation's highways.

Research has been broadened by a number of companies to develop new compounds. An increasing proportion of this research is being devoted to testing the new compounds for residues in or on food, and for toxicity. Company estimates indicate it takes four to five years and from $1.2 million to $1.5 million to develop a single new pesticide chemical to the marketing stage.

p-Dichlorobenzene—This material, according to producers, is being sold on spot for 12c. per pound, delivered. Previously the listing had been 12c. per pound, f.o.b., and prior to that, it had stood at 14½c. per pound, delivered. The downward movement commenced with the price shifting of one producer. Others followed suit and then the second movement took place. The shifts appear to reflect no particular market condition but rather retaliatory reactions on the part of producers to protect their own positions.

Ammonium Sulfate & Ammonia Liquor Data for November

The following information on production, sales and end-of-month stocks for ammonium sulfate and ammonia liquor covers data for October, November, 1955 and totals for the first eleven months of 1955 and 1956. The figures, according to the Bureau of Mines, are preliminary and are revised in final reports.

	November 1956					
	Quantity	*Change from last month Percent*	*October 1956*	*November 1956*	*Calendar year to date 1956*	*1955*
Production:						
Ammonium sulfate	pounds 155,376,409	— 3.4	160,834,749	162,721,200	1,612,005,285	1,793,213,300
Ammonia liquor (NH_3 content)	pounds 3,144,504	— 3.2	3,247,732	3,089,500	32,320,423	31,102,500
Sales:						
Ammonium sulfate	pounds 146,731,962	+13.8	128,933,464	138,921,600	1,591,556,988	1,694,777,600
Ammonia liquor (NH_3 content)	pounds 1,959,338	— 0.7	1,972,763	1,969,900	20,431,397	18,012,500
Stocks, end of month:						
Ammonium sulfate	pounds 415,600,323	+ 2.2	406,823,677	407,410,694	415,600,323	407,410,694
Ammonia liquor (NH_3 content)	pounds 2,836,247	+ 4.3	2,719,206	3,437,402	2,836,247	3,437,402

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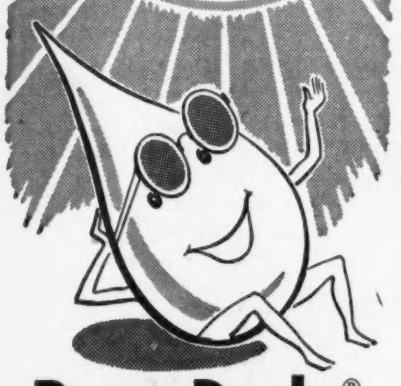

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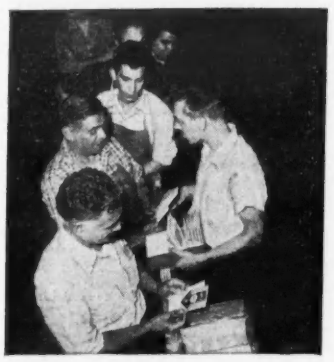

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Petroleum Derivatives

Prices of aliphatic solvents were advanced 1c. per gallon across the board in a move initiated last Monday by a major producer and followed shortly after by other makers. Under the new schedule, New York prices were adjusted to the following levels:—petroleum naphtha, VM&P, tanks, 19c. per gallon; tankwagons, 20½c. per gallon; rubber solvent, tanks, 19c. per gallon; stoddard, tanks, 19c. per gallon; lacquer diluent, tanks, 20c. per gallon; mineral spirits, tanks, 18c. per gallon; tankwagon, 19c. per gallon; odorless tanks, 34½c. per gallon; cleaner's naphtha, 19c. per gallon; and heptane and hexane, 20c. per gallon.

On the West Coast the advances were limited to ½c. per gallon, while in Ohio increases totaled 1½c. per gallon. The higher advance in Ohio was accounted for by increased freight rates, since in that state shipments are made on a delivered basis.

Benzol, along with other solvents available from the cokeoven industry, was not included in the price advance. Indications are that these materials will be left unchanged at least until April 1, and that action at that time will depend upon a variety of market factors, including developments in the coaltar field and the level of imports.

Production of crude oil in Texas fields during February was increased last week by the Railroad Commission 92,970 barrels a day to 3,543,672 barrels daily, establishing an all time high for Texas output. In other crude oil developments, a major oil company reported last week that crude production in Saudi Arabia during December totaled 21,400,295 barrels for an average of 690,332 barrels per calendar day. Confirming the critical effect the brief Suez war has had on oil production, these figures were substantially below the 31,874,682 barrels, averaging 1,028,216 barrels daily, that were reported for the corresponding month of 1955.

Another report issued last week gave further confirmation of the trend toward increased use of toluol in automobile gasoline. Premium gasoline with octane number of 97 or over was sold in 27 cities in the United States during the last week of December, it was reported, as compared with only 20 cities in October, when the last survey was made. Further details on this report are given below.

Price Trends

Advanced

Aliphatic solvents, West Coast shipping points, ½c. per gallon.
Ohio, 1½c. per gallon.
all other areas, 1c. per gallon.

Reduced

None.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 27, 1956
107.64	105.71	105.71	104.37

For Current Prices see Page 9

Solvents and Diluents

Aliphatic Solvents—Quotations on all aliphatic solvents were increased 1c. across the board in a general advance that was initiated last Monday by a major producer. Sources close to the trade had been anticipating such an advance ever since crude oil started to firm. As examples of the new schedule, following are prices quoted on a New York basis:—petroleum naphtha, VM&P, tanks, 19c. per gallon; tankwagons, 20½c. per gallon (representing an increase in the differential of ½c. per gallon); rubber solvent, tanks, 19c. per gallon; stoddard, tanks, 19c. per gallon; lacquer diluent, tanks, 20c. per gallon; mineral spirits, tanks, 18c. per gallon; tankwagon, 19c. per gallon; odorless tanks, 34½c. per gallon; and cleaner's naphtha, 19c. per gallon.

Toluol—Increasing use of this solvent in high octane gasoline was evidenced last week by data reported in a quarterly motor gasoline survey. Premium gasoline with octane numbers of 97 or over was sold in 27 cities in the United States during the last week of December, the publiation reported, as compared with only 20 cities in October, when the last survey was made. The national octane average in premium gasoline rose from 96.8 in October to 97 in the latest report. The regular gasoline octane average increased .5 to 90. As weighted averages, these figures take into account the varying level of sales in different areas of the country.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended January 5 totaled 259,983,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 264,241,000 barrels for the preceding week, this represents a decrease of 4,258,000 barrels, comprising a decrease of 3,711,000 barrels in stocks of domestic crude and a decrease of 547,000 barrels in stocks of foreign crude.

Lighter Fractions

Butane—Production of butane from December 16 to December 31 amounted to 72,434,000 gallons, as compared with 71,490,000 gallons during the previous two weeks, it was reported last week by the American Petroleum Institute. Stocks on December 31 were down to 153,198,000 gallons from 159,803,000 gallons on December 15.

Business volume continues excellent because of exceptionally high demand for heating fuels. Supplies are judged adequate for the season, and the price outlook is steady.

Isobutane—Output of this material from December 16 to December 31 totaled 23,506,000 gallons, as compared with 17,495,000 gallons in the previous two-week period, according to the bi-monthly report of the American Petroleum Institute. Stocks on December 31 stood at 10,124,000 gallons, declining from the 11,423,000 gallons reported for December 15.

Propane—Production during the last two weeks of December was reported at 152,333,000 gallons. This compares with output of 131,778,000 gallons in the previous two-week period. Stocks on December 31 stood at 383,211,000 gallons, showing a seasonal decline from stocks of 421,673,000 gallons held on December 15.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended January 4 indicate an increase in crude-oil production and a decrease in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 7,417,000 barrels, an increase of 25,000 barrels from the preceding week. Daily average crude runs to stills of 8,290,000 barrels were 105,000 barrels below the preceding week, and 270,000 barrels above the week ended January 6, 1956. Runs of forign crude amounted to 888,000 barrels daily, compared with 743,000 barrels in the preceding week. For the four-week period ending January 4, crude oil production averaged 7,385,000 barrels daily and crude runs to stills averaged 8,187,000 barrels daily with runs of foreign crude averaging 881,000 barrels daily.

Crude oil production in Saudi Arabia during December totaled 21,400,295 barrels for an average of 690,332 barrels per calendar day, a major oil company reported last week. Reflecting the crisis brought on by the brief Suez war, these figures were substantially below the 31,874,682 barrels averaging 1,028,216 barrels per calendar day that were reported for the corresponding month of 1955.

One of the largest refineries in Saudi Arabia reported that its crude output in December amounted to 5,974,548 barrels, averaging 192,727 barrels per calendar day, as compared with 7,448,506 barrels, averaging 240,274 barrels per calendar day during the same month of 1955.

Heptane—In response to the crude oil advance, quotations of this aliphatic were advanced last Monday by 1c. per gallon, making the Bayonne, New Jersey price 20c. per gallon.

Hexane—Producers advanced their listings 1c. per gallon last Monday to reflect the crude oil advances of recent weeks. The Bayonne, New Jersey price is now 20c. per gallon.

FDA Proposes New Rule On Antibiotics for Mastitis

The Food and Drug Administration announced last week that it is proposing to amend its regulations relating to the labeling of antibiotic preparations used for treatment of mastitis in dairy animals to require that they contain a warning against using the milk from such cows.

In a notice published in the *Federal Register*, January 23, the agency invited interested persons to submit their views in writing in thirty days to the addition of the following new paragraph to its regulations:

"On the immediate container, if it is intended for use in the prevention or treatment of mastitis in dairy animals by intramammary infusion, the statement 'Warning—Milk taken from dairy animals within (blank) hours after the latest treatment for mastitis must not be used for human consumption,' the blank being filled in with the number 72, unless the person who requests certification has submitted to the Commissioner information adequate to prove that milk from dairy animals treated with the drug as prepared by him contains no antibiotics after a time period that is shorter than 72 hours after the latest treatment. In such cases, the blank shall be filled in with the number 60, or 48, or 36, or 24, as authorized by the Commissioner."

Hercules Names Hastings To Comptroller's Position

Edward C. Hastings has been appointed comptroller of Hercules Powder Company, Wilmington, Del. He succeeds William S. Harkins, who has retired from the post after forty-eight years of service.

Mr. Hastings joined Hercules in 1930, and since has held various positions in the treasurer's department. He became assistant comptroller in 1951.

Ethylene Glycol

—Continued from page 3

ery gases which it uses as a raw material from the adjacent petroleum refineries of Continental and Cities Service.

Ethylene glycol is principally used as a permanent anti-freeze fluid for automobiles, although it has many other uses as a solvent and as an ingredient in other compounds. All of the Calcasieu stockholders market anti-freeze fluids and will draw their supplies from the Lake Charles plant after it is completed. Current plans call for such completion in very early 1958.

Ethylene oxide, the intermediate product to be produced in the plant, is one of the most valuable of all of the petrochemical "building blocks" and is useful in the production of detergents and many other petrochemical compounds.

The new plant will use a process licensed to it by Shell Development Company and will be constructed by Lummus Company, New York.

Construction of the Calcasieu plant is being carried out under the direction of P. C. I. executives from its general offices in New Orleans, including J. H. Olehy, general manager of manufacturing, and L. E. Taylor, chief engineer.

The Lake Charles operations are under the direction of Loren Grubb, regional manager. When completed, the plant will be staffed and operated by approximately fifty employees of Petroleum Chemicals, Inc.

Agriculture Chemist

—Continued from page 7

data on fats and oils, which are mixed es'ers of fatty acids and glycerine.

Such fundamental data as Dr. Dutton obtained on the structure of natural glycerides shed light on the mechanism by which these glycerine derivatives are synthesized in nature; point to commercial potentialities for separating chemically pure triglycerides or "tailormade" fractions from fats and oils, and enhance the utility of fats and oils as industrial chemical raw materials.

Second award ($300 and honor plaque) went to Dr. Donald B. Zilversmit, professor of physiology at the University of Tennessee medical units in Memphis, for his use of glycerine as a suspension medium in preparing high-caloric fat emulsions for intravenous injection.

Previously such fat emulsions were formulated with water, but they were unstable because of hydrolysis of the phosphatides and triglycerides in the emulsion. With glycerine formulations, it is now possible to prepare fat emulsions which are stable enough for commercial production and distribution. This widens the availability of such nutrients for patients unable to take nourishment by mouth.

Third award ($200 and honor plaque) was won by Dr. Stanley G. Knight, professor of bacteriology at the University of Wisconsin, for his research establishing a glycerine derivative, triacetin, as a new fungicide.

In evaluation studies of triacetin ointments and lotions as fungistatic agents, fifty-eight out of eighty patients afflicted with superficial fungus and allied infections of the skin, nails and scalp were cured, and most of the remaining patients showed definite improvement.

Chemical Salesmen

—Continued from page 4

year terms were the following: Jerome F. McGinty of Millmaster Chemical Corporation; L. P. London of E. I. duPont de Nemours & Co.; Stewart Cowell of J. T. Baker Chemical Company; John Seidler of Whittaker, Clark & Daniels, Inc., and Frederick A. Koch of Dow Chemical Company.

Mr. Rebak joined the Grace organization in his present capacity in August, 1953. Previously, he was assistant to the general sales manager of Heyden Chemical Corporation, now Heyden Newport Chemical Corporation. He was also associated with Dodge & Olcott, Inc.

Perfumers Society Elects Bouillette to Presidency

Officers and directors were elected by the American Society of Perfumers at its recent annual meeting in New York.

Pierre Bouillette, Givaudan-Delawanna, Inc., is the new president and Christian F. Wight, van Ameringen-Haebler, Inc., former president, has become chairman of the board of directors.

August J. Schwindeman, Dodge & Olcott, Inc., was elected vice-president, while Dr. Oliver L. Morton, Shulton, Inc., and Edwin D. Morgan, jr., Lever Bros., remain secretary and treasurer, respectively.

'Good Faith'

—Continued from page 4

of giving the opposition a chance to be heard before acting on the bill.

The bill is now being circulated by the house committee among the various agencies of the government concerned with the legislation, such as the Department of Justice, Federal Trade Commission and the Department of Commerce, for their comments before proceeding to set a date for hearings.

Unless there has been a major change in sentiment since the bill came before the house last year, there is every reason to believe that the measure will slide through with ease if its gets out of the house committee. Last year when the same bill came up on the floor, it was passed by the overwhelming vote of 393 to 3, although at the time questions other than just the merits of the bill entered into the count.

DCAT Reservations Mount

Drug, Chemical and Allied Trades section of the New York Board of Trade has already received over 1,700 reservations for its thirty-first annual dinner. The affair, to be held March 7 at the Waldorf-Astoria hotel, New York, is expected to attract some 2,400 business executives from all parts of the nation.

Eastman Unit Names V.P.

Gregory Smith, vice-president and assistant general manager of Eastman Gelatine Corporation, has been elected president and general manager of the organization. Mr. Smith succeeds Henry P. Nelligan who has retired.

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Aliphatic Organics

Following listless trade in December attributable in part, perhaps entirely, to seasonal factors, methylene chloride was moving to much stronger demand in recent weeks. Trade sources forecast better business in 1957 than that recorded in 1956, which was termed excellent. Chief demand was for use of methylene chloride in non-inflammable paint removers and as a solvent and propellant extender in aerosol sprays. Other substantial outlets were for solvent use in manufacture of plastics and in the production of pharmaceutical and photographic chemicals. Supply was adequate currently, but a shortage in the future was considered quite possible. New production was coming on, however, and might forestall this, it was felt in some quarters.

Trade in vinyl acetate was brisk, as this market continued to grow vigorously. Any seasonal decline, such as that noted at about this time in the two years previous, was masked by deeper penetration of established market outlets and diversification of markets. Non-woven fabrics and paper coatings were leading in demand, with the new vinyl acetate paint emulsions and laminating resins used in manufacture of safety glass providing good support.

Pentaerythritol remained on the slow side, as trade in alkyd resins was disappointing. Seasonal factors, such as outdoor painting, were largely responsible, it was believed, but there were reports that automotive sales in some parts of the country were poor—certainly no seasonal factor.

The formaldehyde market was strong and highly competitive. Phenolic, melamine and urea resins were providing firm support. The one weak spot here was plywood, off on account of fewer starts on new homes.

Acetone prices have gained strength over the past six months, trade sources reported, and could be regarded now as quite stable.

The recent 5 cents per pound reduction in ethyl silicate prices was expected to build stronger demand for this material for use as a mold binder in manufacture of investment castings.

October production figures for acetic acid, ethylene glycol and pentaerythritol were the highest recorded in any month in 1956 up to that time. That for output of acetic anhydride was the lowest reported during the same ten-month period.

Acetic Anhydride — Production was down markedly in October Tariff Commission data indicated. That month's output, 70,276,528 pounds, was the least recorded for any month in 1956 up to that time. By contrast, production in the month previous was 74,808,448 pounds.

Aggregate for the first ten months in 1956 was 744,159,899 pounds. Output in twelve months of 1955 was 843,492,429 pounds.

Acetone—The price structure, considered by some trade sources to have been a little wobbly six months or so ago, was now universally regarded as stable. With additional material now available as a by-product of the cumene process for manufacture of phenol, and with more of this due to come on the market soon, supply was ample and more reliable than it had been formerly. Demand was strong for a rather heavy volume, trade sources reported.

Carbon Disulfide—Output in September was 42,233,904 pounds, the Tariff Commission reported, off slightly from the 44,551,510 pounds produced in the month previous.

Total for the first nine months of calendar 1956 was 418,208,552 pounds, including a monthly high of 52,618,531 pounds produced in January and a low of 37,417,696 pounds turned out in July. Entire output of calendar 1955 was 564,730,676 pounds.

Carbon Tetrachloride—Demand continued to grow along with the rapid development of new markets for aerosol sprays. There was additional news last week of new aerosol applications and new plant facilities for bringing them onto the market. Carbon tet has been a leader in its use in manufacture of aerosol spray propellants, having by now gained far more ground in this field than enough to compensate for that lost to less toxic new compounds that moved in on the dry cleaning market.

Production in October amounted to 29,169,813 pounds, the Tariff Commission reported, compared to output of 25,152,151 pounds in the month previous. In the first ten months of 1956, the October figure was topped only once—by the 29,755,661 pounds turned out in March. Cumulative total for the ten months was 252,996,320 pounds. Total production in entire year 1955 was put at 275,452,245 pounds.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 27, 1956
130.87	130.87	130.81	131.02

For Current Prices see Page 9

Ethanol—Sharp demand for both commercial and government uses made for a continuing strong market last week.

Figures just released by the Alcohol and Tobacco Tax Division of the Treasury Department's Internal Revenue Service indicated that consumption of specially denatured alcohol in the fiscal year ended last June, 30 amounted to 407,661,849 wine gallons. Of that amount, however, 147,949,788 gallons was alcohol recovered from previous use. New alcohol used was 259,712,061 gallons. Recovery of alcohol used during the fiscal year was 149,217,167 gallons.

A total of 188,831,382 gallons of new special denatured alcohol and 43,970,340 gallons of recycled special denatured alcohol was used as a raw material in manufacture of other chemicals, from which operations 42,052,114 gallons were recovered. The breakdown on these figures in wine gallons, follows:

	New Used	*Recovered Used*	*Recovered From Use*
Vinegar	9,076,716	.....	.....
Acetic acid...	6,223,613	.....	191,291
Ethyl acetate.	6,114,675	2,453,956	2,268,606
Ethyl Chloride	4,243,037	1,116,182	36,104
Other ethyl esters	6,519,966	1,762,428	2,012,646
Dyes & intermediates..	258,859	105,758	89,690
Aldehydes ...	122,709,253	1,657,765	1,602,025
Ethyl ether..	1,153,508	1,074,736	.....
Ethers, including glycol...	4,516,705	31,784,236	31,843,770
Ethylene dibromide ..	1,808,402	66,361	66,663
Drugs & medicinal chems.	624,865	3,934,534	3,935,985
Xanthates	292,120	.....	.....
Fulminate of mercury	1,692	.....	.....
Ethylene gas..	748,463	.....	.....
Syn. rubber..	19,336,224	.....	.....
Rubber accelerators	960,373	.....	.....
Miscellaneous.	4,222,651	14,384	5,334

Tobacco sprays and flavors consumed 1,060,393 wine gallons of denatured rum during the fiscal year. There was no recovery of this material and no recovered material used in this application.

Ethanolamines—Output declined in October to the lowest figure recorded in any month of 1956 up to that time. Tariff Commission reported October production was 6,815,204 pounds, including the mono-, di- and tri-ethanolamines. The corresponding figure reported for the month previous was 7,003,020 pounds.

Total for the ten months in 1956 was brought up to 76,795,182 pounds. Total production in entire year 1955 was 78,394,250 pounds.

Formaldehyde—Except for one soft spot, formaldehyde was in heavy demand last week. Continuing large production quotas for the melamine, urea and phenolic resins were behind the health of this market.

Plywood was the soft spot, and this, in turn, was depressed by slack activity in home building. Home building was by now consuming formaldehyde in diverse ways, in exteriors as well as in interiors and in the composition of forms for pouring concrete. Though heavy construction was booming, starts on new homes were off. The furniture business was reported to be riding a seasonal crest, but this industry was consuming relatively little plywood.

Glycerine—Imports fell off abruptly in

Aliphatic Organics

November, figures just released by Association of American Soap and Glycerine Producers indicated, while production and exports declined moderately. Domestic consumption was off more than 1.8 million pounds. Producers' stocks continued to grow but at a slackened pace.

November production of 20,312,000 pounds and imports of 1,095,000 pounds were added to stocks amounting to 66,530,000 pounds at the beginning of the month, bringing the total volume of available material to 87,937,000 pounds. Some 691,000 pounds was exported. Since stocks added up to 67,253,000 pounds at the end of the month, apparent domestic consumption during the period was 20,003,000 pounds.

Comparable data for October were 21,256,000 pounds produced, 1,913,000 pounds imported and stocks at the beginning of the period amounting to 65,892,000 pounds, for a total of 89,061,000 pounds available, less apparent domestic consumption of 21,814,000 pounds and 717,000 pounds exported.

Aggregate figures for the first eleven months in 1956 were 225,562,000 pounds produced, 15,757,000 pounds imported and stocks as of January 1, 1956, amounting to 51,977,000 pounds, for a total of 293,296,000 pounds available, less 216,667,000 pounds apparently consumed on the domestic market and 9,376,000 pounds exported, leaving stocks as of November 30, 1956, at 67,253,000 pounds.

Corresponding figures for the first eleven months of 1955 were 206,228,000 pounds produced, 25,313,000 pounds imported and stocks as of January 1, 1955, amounting to 42,359,000 pounds, or a total of 273,900,000 pounds available, less apparent domestic consumption of 216,781,000 pounds and 9,214,000 pounds exported, leaving stocks of 47,905,000 pounds as of November 30, 1955.

(All figures are in terms of 100 percent glycerine content.)

Methanol—Very strong demand, notwithstanding the substantial price increase put into effect January 1, has been chararteristic of this market in recent weeks.

Air Force orders for methanol for use in jet-injection fuel systems have been giving this market a big lift.

In the automotive field, a methanol-water mixture was adapted in accordance with similar principle. This application was said to be a market factor already in the middle west. Some trade sources thought its market development might run into formidable obstacles, however, since the mixture could be used with poorer grades of gasoline.

Leading oil companies were now marketing methanol preparations for use in automotive cooling systems. In this application, use was made of the water absorbency of methanol in prevention of freezing.

Production of synthetic methanol amounted to 132,825,612 pounds during October, 1955, Tariff Commission reported, bringing the calendar year total for ten months to 1,257,062,390 pounds. With the commission's October figure on natural methanol not yet reported, the ten month total output for methanol in both categories was brought up to 1,268,642,550 pounds. Census Bureau said October production of natural methanol was 189,000 gallons.

Synthetic output in entire year 1955 was 1,331,991,608 pounds.

Methylene Chloride—Sales volume was picking up smartly following a rather dull December attributable largely, if not entirely, to seasonal factors. Trade sources said that there were convincing indications that 1957 would be an even better year than 1956, which was termed excellent. For the present, demand was brisk, supply adequate. Projection of current demand trends suggested a possibility of short supply in future. However, one new major producer has recently gone on stream, and another had a plant under construction.

The market consisted chiefly in use of methylene chloride in non-inflammable paint removers and as a solvent and propellant extender in aerosol sprays. Additional demand was for its use as a solvent in plastics manufacture and in the production of pharmaceutical and photographic chemicals.

Pentaerythritol—Trade was still on the slow side last week. Industry sources said most of the sales deficit could be attributed to seasonal influences. Alkyd resins were not moving as well as they had been, it was reported. This aspect could be explained in part by the fact that automobile sales were disappointing in some parts of the country, certainly not a seasonal factor.

Seasonally, outdoor painting was nearly at a standstill, adversely affecting movement of alkyd resins and, indirectly, pentaerythritol.

It was noted that production of PE in October was the greatest recorded in any single month of 1956 up to that time.

Perchloroethylene—Production amounted to 16,011,631 pounds in October, the Tariff Commission reported, up substantially over the 12,044,899 pounds turned out in the month previous. October output was the greatest recorded since June. In the first ten months of last year, the biggest month in production, 18,148,026 pounds, was May, while the poorest showing was 10,890,334 pounds produced during July.

Aggregate figures were 151,469,447 pounds produced in the first ten months of 1956 and 176,997,831 pounds turned out in entire calendar year 1955.

Vinyl Acetate—Trade was brisk last week as this market continued to grow vigorously. Sales volume was described as normal. Any seasonal decline—such as that observed at this season last year and the year before—was masked by diversification of the market and deeper penetration of previously established outlets.

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NPSS-2

Jobs & People

American Machine & Foundry Company, New York—**John C. Dabney,** formerly director of industrial development for the State of Florida, has been named AMF director of marketing.

Bakelite Company, New York, a division of Union Carbide & Carbon Corporation—**J. W. McLaughlin** has been named manager of Bakelite's film and sheeting division.

Godfrey L. Cabot, Inc., Boston, Mass.—**Page Bullock** has been assigned as a technical sales representative for Cabot's white pigments department to Akron, Ohio.

Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation—Named group leaders at Carbide's South Charleston, W. Va., plant are **J. W. Chatfield, C. J. Haines, J. W. Kearns, J. W. Simeral** and **W. H. Swango.**

Chemstrand Corporation, Decatur, Ala.—**Hamilton Hadden, jr.,** has become director of Chemstrand's legal department and secretary of the corporation.

Diamond Black Leaf Company, Cleveland, Ohio — **Bernard Clayton** has become manager of Diamond Black Leaf's western district sales office in San Jose, Calif.

E. I. duPont de Nemours & Co., Wilmington, Del.—**J. H. McMillan** has been made manager of duPont's new pigment department's district office in Atlanta, Ga. **V. O. Webb** has been assigned to the Atlanta office as a salesman. **Harry E. Schreiber,** manager of the department's Chicago district for the last fifteen years, will retire March 31. He has been succeeded there by **John L. C. Brooke,** formerly pigments manager in the Boston district. Mr. Schreiber will remain as an adviser in Chicago until his retirement becomes effective.

Esso Standard Oil Company, New York—**Gifford H. Symonds,** executive secretary of Esso's manufacturing technical committee since 1948, has been named coordinator to promote the application of mathematical and statistical technics to problems of the company's manufacturing department dealing with forecasting, scheduling and similar matters.

Francolor, Inc., Woonsocket, R. I., a division of Compagnie Francaise des Matieres Colorantes—**Joseph F. Bradley,** for the past five years with Woonsocket Color & Chemical Company, has joined Francolor as a technical sales representative.

General Tire & Rubber Company, Akron, Ohio—**Dr. Anthony J. Urbanic** has been appointed assistant director for material development by General Tire.

International Minerals & Chemical Corporation, Chicago—**Richard N. Hill,** an engineer in the research division of International Minerals at Lakeland, Fla., has been promoted to development manager in the Perline department of the company's industrial minerals division at Los Angeles.

Koppers Company, Pittsburgh, Pa. —**E. H. Tenthoff** and **Eric M. Jones** have been appointed manager and assistant manager, respectively, of the new polyethylene plant being constructed at Woodbridge, N. J., by Koppers.

Merck & Co., Rahway, N. J.—**Joseph A. McGroarty** has been named to the newly-created post of industrial accounts manager in the sales department of Merck's chemical division.

Mobay Chemical Company, St. Louis, Mo.—**Philip J. Lowry** has been appointed manager of Mobay's sales district in Akron, Ohio.

Monsanto Chemical Company, St. Louis, Mo.—**David G. Comerford** has been named chief accountant for Monsanto's research and engineering division in St. Louis. **John S. Sullivan** has been made a special sales representative for agricultural products in the overseas division. **Carl N. Bender** will join the maintenance and construction department of Monsanto's Nitro, W. Va., plant February 1. **George O. Langlais** has become a member of the technical service department of the plastics division at Springfield, Mass. **Royal T. Williams** has joined the accounting department of that division in Texas City, Tex. **E. S. Brockney** has been appointed sales manager for "Polyflex 100" film and sheeting for the plastics division. **Charles S. Cheston, jr.,** has joined that division's sales staff at Springfield. **James R. Hopkins** has joined the engineering department there, while **Howard B. Kreider** has been made a member of plastics' research department at Springfield. **Joseph Jaffe** has joined the research department of Monsanto's inorganic chemicals division at Everett, Mass., as has **Richard T. Haynes. Norman L. Case** has joined inorganic sales in St. Louis, and **James A. Oates** has become a member of the division's sales department at El Dorado, Ark.

National Brands Division, Sterling Drug, Inc., New York—**John C. Marshall** has been appointed a statistical analyst in the National Brands market research department.

National Starch Products, New York—**Jerome Stern** and **Charles J. Steed, jr.,** have been promoted to sales supervisors for the east and midwest, respectively, for National Starch's resin division.

Olin Mathieson Chemical Corporation, New York—**Dr. Joseph D. Campbell** has been named agronomist for the north-central district of Olin Mathieson's plant food division, with headquarters in Omaha, Neb.

Parke, Davis & Co., Detroit, Mich. —**C. J. Cowles** has been made assistant manager of the hospital and biological division in the Parke-Davis sales department. John Cotter has been named field manager of the firm's Boston branch.

Patterson - Sargent Company, Cleveland, Ohio—**Irving C. Black,** vice-president and director of trade sales for Patterson-Sargent, last week was honored at a testimonial luncheon in Cleveland on his fifty years of service with the company.

Pitt-Consol Chemical Company, Newark, N. J. a subsidiary of Pittsburgh Consolidation Coal Company —**Irving S. Geer** will represent Pitt-Consol in its sales of refined acids, phenolic molding compounds and certain new products now under development. **John H. Lauterbach** will serve as technical sales representative for the company in the New York-New England area, concentrating on sales and service relating to phenolic molding materials. **Jack H. Rines** will represent the company for sales and service of its petroleum and coaltar chemicals, molding materials and other products under development, operating out of Pittsburgh, Pa.

Potash Company of America, Washington, D. C.—**F. H. Kennedy** has been made midwest sales manager for Potash Company, succeeding **T. E. Bradley,** who has retired. **Shelton Appleton,** who previously represented the firm in the southwest and shifted to the Peoria office a few months ago, has taken over Mr. Kennedy's former accounts.

Standard Aromatics, Inc., New York — **Franklin H. Cooper** has joined Standard Aromatics as technical service director.

Polymeric Plasticizer Made By Emery Industries, Inc.

A new high molecular-weight polymeric plasticizer, "Emery 3049-S," is being introduced by Emery Industries, Inc., Cincinnati, Ohio.

The light-colored product is said to overcome processing difficulties often encountered in high molecular weight plasticizers, permitting easy processing on conventional equipment.

"Emery 3049-S" also provides all the extreme permanence characteristics of high-molecular-weight polymerics, including very low migration, excellent resistance to extraction, and low volatility, as well as excellent electrical properties, according to the company.

Suggested uses for "3049-S" are in making infant accessories, upholstery material, industrial tapes and gaskets, and all other products that can benefit from permanence, including low migration.

Acheson Elects Clarke

Acheson Industries, Inc., New York, has created a new position, vice-president in charge of European operations and has elected Edwin G. Clarke, formerly managing director of Acheson's British affiliate, Acheson Colloids, Ltd., to the new post. Mr. Clarke has also been elected a director of Acheson Industries.

BDSA Aluminum Set Aside Rises Three Million Pounds

Business and Defense Services Administration last week announced that 10 million pounds of aluminum will be set aside in the second quarter of 1957 to fill Department of Defense and Atomic Energy Commission contracts. The reserve includes the quantities necessary for defense related "B" products, foil, and ingot for powder.

The reserve is 3 million pounds more than the amount set aside in the first quarter of this year. Officials said that the increase reflects a change in military requirements. The second quarter figure represents 14 percent of the anticipated supply of domestic and imported primary aluminum for that period, the same percentage as in the first quarter.

Chemurgy Crash Program

—Continued from page 5

mittee to investigate the recent one-cent per gallon increase in the price of gasoline.

Mosquitoes—S704 by Sen. Spessard L. Holland of Florida, to provide for further research and technical assistance required for the control of mosquitoes.

Pollution—HR3012 by Rep. August H. Andresen of Minnesota, to make the provisions of the federal water pollution control act retroactive to provide for grants for construction for certain treatment works on which construction was commenced after July 9, 1954.

Small business—HR3109 by Rep. Brent Spence of Kentucky, to increase the amount available to the Small Business Administration for business loans.

Stockpiling—S717 by Sen. Stuart Symington of Missouri to provide for the stockpiling, storage, and distribution of essential foodstuffs, and other essential items for the sustenance of the civilian population in the event of enemy attack or other disaster.

Weeds—S672 by Sen. Edward J. Thye of Minnesota, for the control of noxious weeks on land under control or jurisdiction of the federal government.

Petroleum Chemicals

—Continued from page 7

that full production might be achieved before January, 1959.

Foster Wheeler Corporation has contracted to build the butyl plant on a site adjoining PCI's other petrochemical plants at Lake Charles.

The butyl rubber plant, like the other plants, will draw its raw material requirements from the hydrocarbon streams available at the Lake Charles refineries of Cities Service and Continental Oil Companies, joint owners of Petroleum Chemicals, Inc.

Butyl rubber was first developed by Standard Oil Company of New Jersey, which built and operated two wartime plants for the government. Standard later bought the plants from the government and has continued to operate them. Petroleum Chemicals has acquired a license from Standard covering its patents and "know-how."

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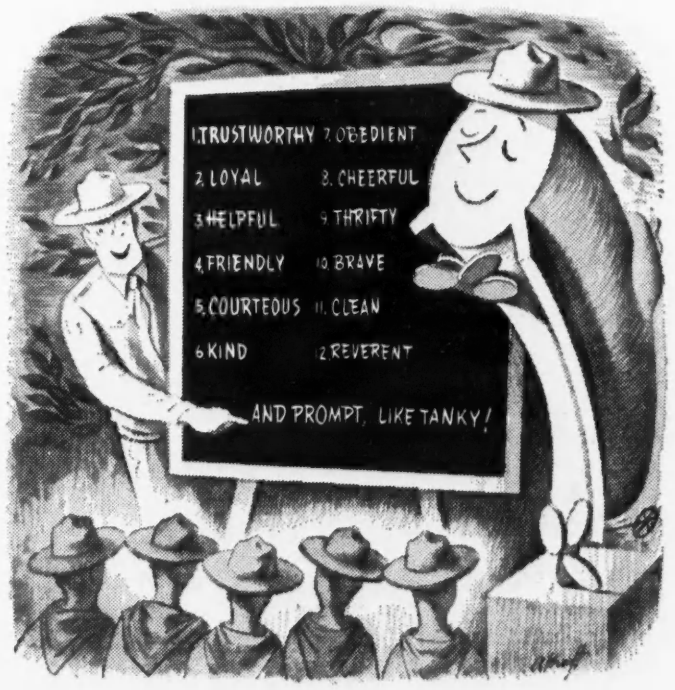
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Coal Chemicals

Benzol continued in very heavy demand last week. Though cokeoven output was consistently reported at close to capacity and imported benzol was still coming into this country in big volume, there was just enough material available to satisfy immediate requirements of consumers. Since much the greater part of the foreign material docked here originated behind the Iron Curtain, its future availability depended on erratic political developments. Trade sources raised the question whether the petroleum industry would be able to cover the supply deficit that would appear if the Red bloc were suddenly to cut off exports.

Naphthalene was moving only sluggishly. The upturn in trade in phthalic anhydride was not yet all that had been hoped for, and the market for naphthalene had to wait on improvement in the phthalic trade. Dealers said that the list price for imported naphthalene offered no advantage over domestic prices, and, as a result, spot trade on imported material was limited to occasional sale of a distress lot at reduced price. Phthalic producers who do not produce their own raw material naphthalene have indicated an interest in imported material, but only at prices 1 cent to 1½ cents per pound below current quotations.

Shipments of finished steel products during November amounted to 7,431,-136 net tons, American Iron and Steel Institute reported. For comparison, shipments were 7,930,957 tons in the month previous and 7,247,994 tons in November, 1955.

The data indicated very heavy activity in construction. Some 46,930 tons of steel piling was shipped during November, a record for any month. Shipments included 774,907 tons of plates, the third largest figure established in any one month since World War II, and 521,645 tons of structural shapes, a figure topped only in the month previous. Including maintenance and contractors' products, the construction business consumed 1,353,191 tons of finished steel products.

Total consumption of finished products in the automotive industry was 1,377,111 net tons.

The institute estimated that steel output during the week ended January 27 would amount to 97.5 percent of theoretical capacity, equivalent to 2,496,-000 tons of steel. Steel production was 2,467,000 tons in the week previous, 2,322,000 tons in the comparable week one month ago and 2,472,000 tons in the corresponding week one year ago.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan.27, 1956
118.31	118.31	115.57	114.89

For Current Prices see Page 9

Basic Products

Benzol—With cokeoven operations consistently maintained at close to capacity, all material coming onto the market was moved promptly out to consumers. While there were no reports of shortages, it appeared that all sources of supply together were just equal to immediate requirements. Included from these sources were substantial output from the petroleum industry and continuing heavy shipments of material from Europe.

There was some concern expressed as to whether this country's capacity for production of benzol would be sufficient to meet anticipated requirements for the next year or two if the European material were to stop coming in. It was pointed out that, in view of the origin of most of this material, political developments made future availability uncertain.

On the other hand, marked increase in demand was forecast for the months immediately ahead. For one thing, the fruitful negotiations for styrene monomer at 12c. per pound were counted on to effect a sharp increase in styrene production. That, in turn, would require substantial additional benzol. Other outlets, manufacture of pesticides and dyes in particular, have been growing also.

If domestic production capacity were to be increased rapidly, trade sources said, such an increase could be brought about only by the petroleum industry. Cokeoven capacity was already being expanded as fast as availability of scrap iron and other limiting factors would permit the steel industry to utilize it. Some industry people believed that this expansion would not materialize fast enough to preclude a shortage in the event that imports were to be cut off at any time during the next few years.

Cresylic Acid—Trade was fairly active last week. The more common cuts were in even balance, with demand steady and production rather heavy. Inventories were generally regarded as normal.

Traders were looking for increased demand for acid for use in manufacture of tricresyl phosphate. They expected the recent 2½c. per pound reduction in the price of TCP to stimulate more active trade. The fact that dioctyl phthalate was also reduced would not offset the TCP price reduction,. they said, since the phthalate was reduced only ½c. per pound. Any really substantial reduction in prices of the phthalates would not be feasible, it was believed, in view of the price of raw material phthalic anhydride.

Naphthalene—Producers were long on supply. Phthalic anhydride, whose manufacture now consumed upwards of 80 percent of the naphthalene sold, conservatively estimated, was moving in only moderate volume. Production, on the other hand, was consistently heavy. Foreign material was coming in under old contract commitments in very substantial volume. The net effect was manifest in unwieldy stocks at producers' plants.

With the list price of imported naphthalene holding at 5½c. per pound, there was no trading in the spot market for imported material, except for an occasional odd distress lot. Phthalic anhydride producers who do not produce their own raw material naphthalene have shown interest in European material at about 4c. or 4½c.

Cokeoven Output: November

Following are cokeoven production statistics comparing November, 1956, and the same month in 1955 as reported by the Bureau of Mines, with cumulative totals for calendar years 1955 and 1956 through November indicated. Only cokeoven output is represented. (Creosote content of creosote-coaltar solutions was not calculated prior to January, 1956.)

	November 1956	*November* 1955	*First Eleven Months* 1956	*First Eleven Months* 1955
Benzol (excluding motor grade)..gals.	17,069,627	16,053,600	160,899,912	157,600,300
Creosote oil:				
Creosote-coal tar solution.....gals.	341,112	228,400	3,438,604	4,571,800
Content in solution.....gals.	271,621	.....	2,874,149	.....
100 percent straight distillate....gals.	2,873,856	2,427,500	21,505,219	23,860,300
Total 100 percent creosote....gals.	3,145,477	.....	24,379,368	.....
Crude coaltar.....gals.	73,194,231	72,277,900	756,341,796	775,624,600
Naphthalene, crude:				
Solidifying under 74° C.....lbs.	3,205,528	3,754,600	33,281,511	34,350,100
At 74° C and under 76° C.....lbs.	1,541,129	1,312,400	14,953,283	16,703,200
At 76° C and under 79° C.....lbs.	10,963,127	11,243,100	114,064,994	117,899,500
Total .....lbs.	15,709,784	16,310,100	162,299,788	168,952,800
Solvent naphtha, refined.....gals.	17,755	45,800	181,918	276,500
Toluol .....gals.	3,363,274	3,289,200	33,676,939	34,859,900
Xylol .....gals.	937,408	912,000	9,494,749	10,363,200

Coal Chemicals

per pound. Distress lots have sometimes gone for that little, but, otherwise, naphthalene was not available at that low a figure.

Traders said that foreign naphthalene never has been in demand here when domestic supply was adequate unless it was offered at a distinct price advantage. They said that the current 5½c. per pound quotation represented no advantage over the 7c. per pound domestic price when extra handling costs and losses due to evaporation and straining are taken into consideration.

Petroleum producers were still hesitant about getting into naphthalene production, an undertaking that several phthalic anhydride producers have been encouraging.

Intermediates

H Acid—Prices were based on 100 percent content in the dry state, with freight allowed. They were $1 per pound in carlots and $1.02 per pound in less carlots. The material was generally packaged in barrels.

Styrene Monomer—Better tone in the rubber industry was giving more support to this market recently. As it has been consistently in the past, demand for use in manufacture of plastics was strong.

The automotive industry, producing in good volume, was consuming more styrene in the form of rubber in the new tires, which require more rubber per unit, and in hose connections, window trim, upholstery and electrical insulation.

General agreement has been reached among leading companies in the chemical and rub r industries on a 12c. per pound price for rubber grade styrene on long-term contracts. Details were still under negotiation. Most of the larger producers expected to be operating in accordance with 12c. per pound contracts by July.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending Jan. 27 was as follows:

Ammonia liquor	lbs.	971,087
Ammonium sulfate	lbs.	41,349,508
Benzol	gals.	3,696,393
Coaltar	gals.	18,168,723
Creosote	gals.	704,821
Naphthalene, crude	lbs.	3,931,336
Pyridine	lbs.	14,096
Toluol	gals.	814,460
Xylol	gals.	234,940

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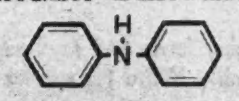

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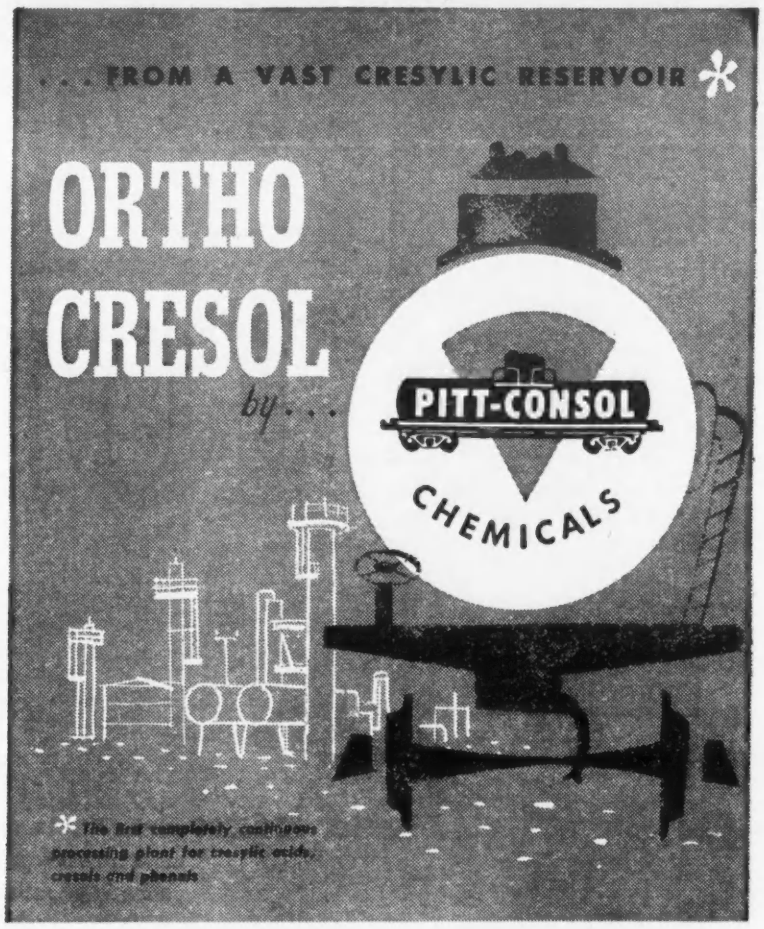
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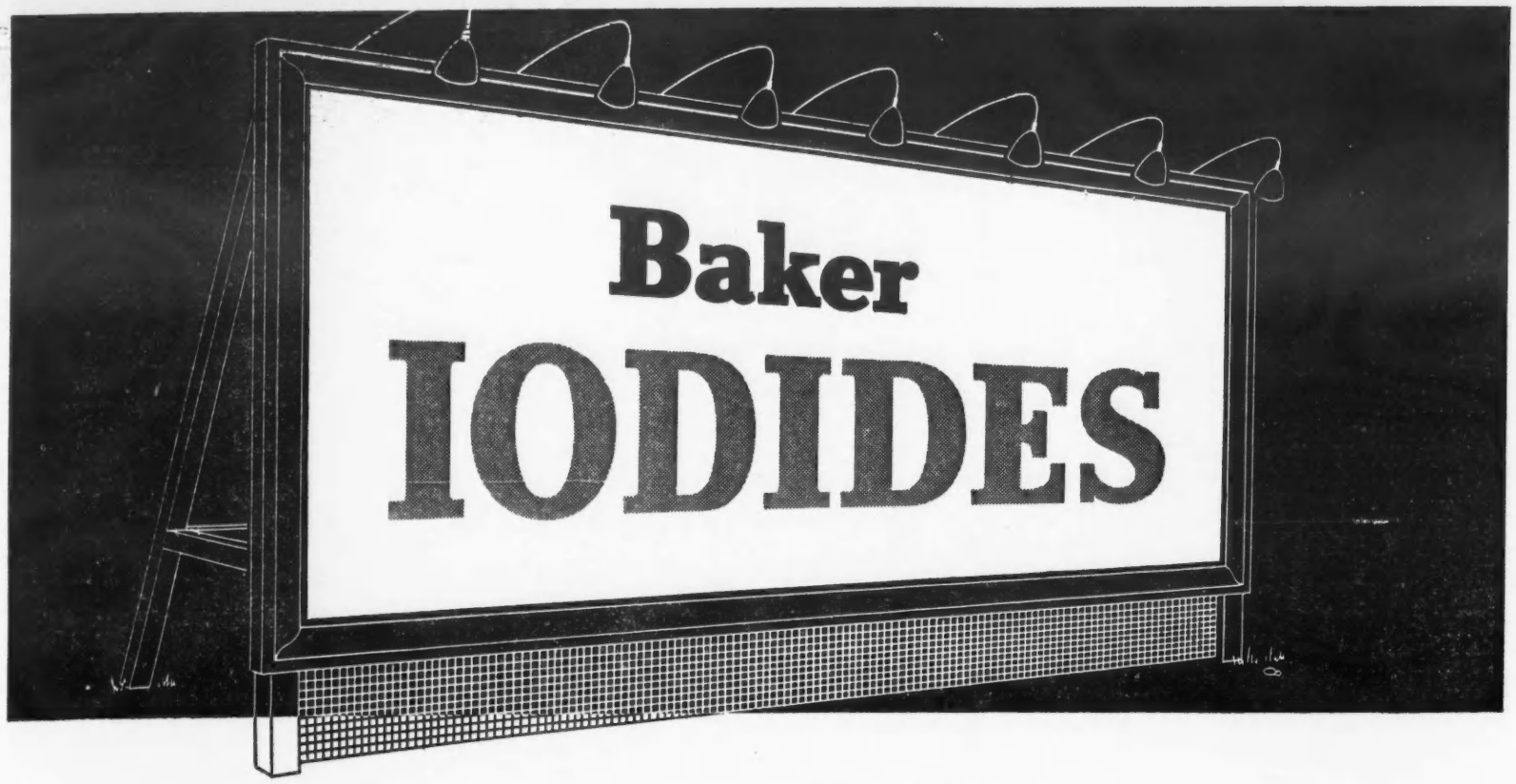

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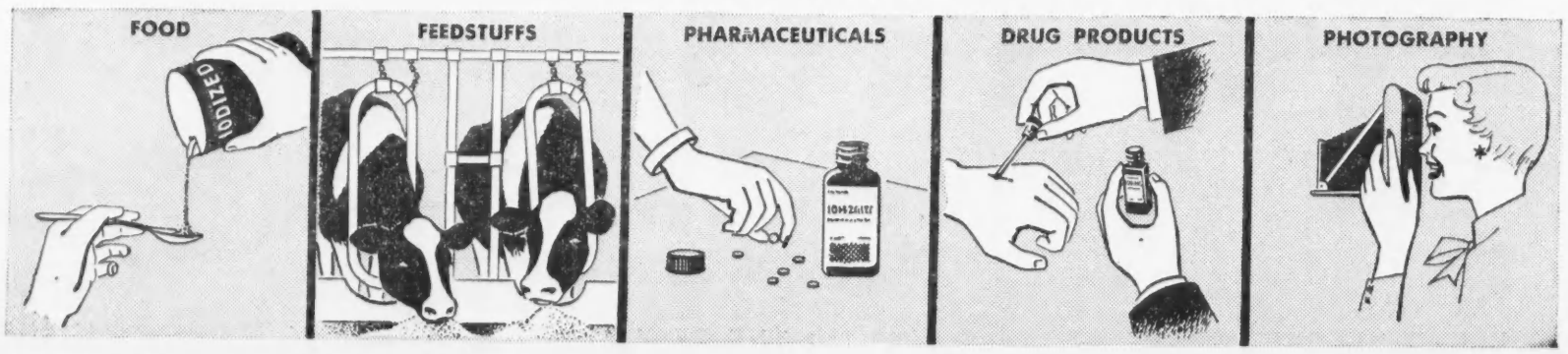

Drugs, Fine Chemicals

Advances on the principle antibiotics effected last Monday by a major producer were not unanimous in the trade at the close of the week. However, it was reported that the matter was under consideration in other quarters and that developments might be expected to be forthcoming this week. Heavy demands and light supplies continued to be the features most in evidence in these markets. It was remarked that technological improvements in penicillin production have come a long way since the 1930's when penicillin was regarded as an unstable laboratory curiosity, to its emergence following World War II as the most potent germ-killer in the antibiotic arsenal.

Aspirin was moving in continued good business volume. It was said that in recent years an increasing number of antirheumatic products have been marketed containing aspirin and cortisone as well as ascorbic acid and aluminum hydroxide as an antacid. The effect of combining aspirin and cortisone in these preparations has been to enhance efficacy while minimizing side effects. Sales to makers of analgesic formulations was said to be continuing at an undiminished pace. Other analgesic compounds such as N-Acetyl-p-amino phenol were being well received in trade circles. Bioflavonoid products used with aspirin and ascorbic acid and acetophenetidin continued to do well.

Calcium pantothenate was being used in multivitamin and B-complex preparations for human consumption as well as in feed supplements for hogs and poultry. All grades of B_{12} were receiving good trade notice. Vitamins as a group continued strong with heavy demands for ascorbic acid and thiamin noted.

Glycine demand was steady for use in pharmaceutical compounding. This item has been preferred, trade sources said, for its relatively pleasant taste, high solubility and amphoteric nature. Stocks were said to be plentiful for the substantial needs of the trade.

Citric acid was moving in good business volume while a general line of tartrates continued to be in moderate demand. Supplies were well in hand.

Methylene blue was said to be in use as an antiseptic and to have some value as a cyanide antidote. Trade preference in recent years was for the crystalline form over the powder since the former has more freedom from dusting tendency. Magnesium trisilicate was in good demand for use in antacid preparations while X-ray grades of barium sulfate were said to be moving to the trade at a steady pace.

Price Trends

Advanced

Dihydrostreptomycin, 1c. per gm.
Penicillin, 1½c. per million units.
Streptomycin, 1c. per gm.

Reduced

None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan.27, 1956
65.27	65.25	65.26	66.40

For Current Prices see Page 9

Ammonium Thioglycollate — Inquiries were routine from manufacturers of cold permanent wave solutions. Prices were firmly quoted on commercial grade 100 percent basis, at $1.30 to $1.60 per pound, depending on quantity and seller. Highly purified material was available at $1.65 to $1.90 per pound. Stocks on hand were said to be quite adequate to care for the current needs of the trade.

N-Acetyl-p-Aminophenol—As an analgesic, this item continued to find good use. It was again pointed out that side effects in its use are minimal and said to be less than those of other drugs which have been used in the past. Supplies were ample to handle the good demands being made on producers at the present time. Previous price levels were firmly held and trade sources anticipated no changes in the near future.

Acid Aminoacetic—Glycine, classified as a nonessential amino acid, was finding moderate use in pharmaceutical compounding. It was said to be favored in the industry because of high solubility, relatively pleasant taste and amphoteric nature. Use of glycine as a muscle stimulant and for the relief of fatigue has declined it was said. Supplies were ample and demands routine.

Acid Citric—Demands were heavy on major producers. Expanding markets for citric acid in areas other than the food and beverage industries was said to have caused substantial increases in citric acid production in recent years. Prices were unchanged and dealers reported no difficulties in satisfying trade needs.

Acid Thioglycollic—Refined acid, 100 percent basis, was offered at $1.30 to $1.50 per pound depending on quantity and seller. Demands were routine and supplies quite adequate.

Antibiotics—Advances instituted last Monday by a major producer of penicillin and streptomycin were not yet unanimous at week's end. However, it was reported that the matter was under consideration in other quarters and that further developments might be forthcoming this week. Market conditions concerning these antibiotic commodities continued in the same vein as has been noted previously. Supplies were light and consumer interest high. The general line of sulfonamides were said to be moving in good business volume and prices were unchanged from former reports.

Aspirin—Demands were good and supplies quite adequate. Trade sources pointed to the increased use of aspirin in corticoid antirheumatic compounds where it was said to lessen side effects while enhancing drug effectiveness.

Calcium Pantothenate—An established member of the vitamin B-complex, cal pan is used extensively in B-complex and multivitamin formlae. It was said that substantial amounts were being used in feed supplements for hogs and poultry. Supplies were adequate to handle the current consumer requirements.

Calcium Phytate—The market was quiet. Trade sources queried indicated that supplies were quite adequate at the present time. Consumer interest was subdued it was said. Price positions were held at levels which have been established in the trade for many months.

Dextrose—USP material was offered in 200 pound drums priced at 17¾c. per pound. Substantial demands were currently being made it was said. Dealers reported stocks were quite ample. Prices in this market have been unchanged for many months. It was pointed out that an abundant source of raw material has always assured stable market conditions to makers of processed corn syrups.

Hesperidin—Demands were routine and stocks ample it was said. Prices on hesperidin and hesperidin methylchalcone were unchanged from previous reports.

Inositol—Needs for inositol for use in B-complex preparations were said to be very good. Demands over the past year were characterized as steady. Prices were firm and unchanged. Fifty pound drum quantities were offered at $4.50 per pound while 5 pound bottles were $5 per pound.

Magnesium Trisilicate—Demands were said to be quite good from makers of antacid products. Makers reported facilities well able to meet the substantial production needs being made. Prices were firmly quoted at 38c. per pound in 5000 pound lots to 45c. for 100 pound lots.

Methylene Blue—This item continued to find use as an antiseptic and has been shown to have some value as a cyanide antidote. Although available for many years, recent trade preference has been for the crystalline form, it was said, due to its freedom from dusting tendency. Producers said stocks were ample and trade needs moderate.

Pectin—NF material was priced at $2.05 per pound. Trade sources indicated that demands over the past year have been very good. It was said that trade needs were steady and price levels were firmly held. A technical grade of citrus pectin powder was offered at $1.35 per pound.

Phenolsulfonates—Zinc phenolsulfonate, NF granular, was priced at 43c. per pound in 5 pound drums while sodium phenolsulfonate was quoted at 48c. per pound.

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Drugs, Fine Chemicals

Prices were firmly quoted and unchanged from levels established in August of last year. Trade needs were said to be routine and stocks quite adequate.

Propylthiouracil—Medicinal needs were said to be moderate for this item which finds use in the treatment of thyrotoxicosis. It was pointed out that in recent years prophylthiouracil has been preferred over thiouracil since the former is said to achieve controlled suppression of thyroid hyperactivity at a lower dosage level. It has been shown that propylthiouracil has a drug potency three times that of thiouracil.

Tartrates—The majority of producers and dealers continued to report a moderate consumer interest in the general line of tartrates. Activity in some quarters was said to have been increased somewhat in recent weeks but the consensus of opinion seemed to be that the present course of steady demands and moderate volume sales would be continued essentially unchanged into the coming weeks. Current price levels were instituted by major producers last October.

Vitamin B_{12}—Trade uses for cyanocobalimin products continued to be widespread with particular interest noted from makers of multivitamin products. Cyanocobalimin, the anti-pernicious anemia factor in liver extract, was available as USP crystals, .1 percent trituration with dicalcium phosphate, and .1 percent trituration with mannitol. Cobalimin products were offered as oral grade solids. Supplies of all grades were adequate.

Botanicals

Trade sources restated last week that botanical drug buying was proceeding at a seasonally normal pace. A host of domestic root and bark items which go into cough and cold formulations were receiving good notice. Supplies of these items were light in many instances, but adequate to cover actual trade needs.

It was noted that domestic drug "farming" in recent years has done much to assure dealers of uniform potency and quality in their drug supplies. Drug value is considerably enhanced, it was said, by the fact that harvests take place when highest potency is reached. This has best been illustrated in this country by cultivation of digitalis leaves. It was pointed out that papain and pyrethrum cultivation is regularly undertaken in tropical regions.

Dealers indicated that good trade interest was evident in rauwolfia root species. Recent reports show that over 40 alkaloids have been identified in rauwolfia serpentina and 26 related species. It has been revealed that 19 different species of rauwolfia contain reserpine in varying amounts. With the latter alkaloid being touted as the most valuable psychiatric aid to be discovered in this century, it is believed raw material markets will continue to show an expanding tendency. It was suggested that whole root preparations have been most efficacious in the treatment of high blood pressure and, parenthetically it was noted, that current Food and Drug Administration requirements are that whole root preparations be made from rauwolfia serpentina. Other root species have been used commercially, chiefly the vomitoria of Africa and the heterophylla found to be abundant in Central America. Although rauwolfia has failed to provide any cures for mental disease, the alkaloid reserpine has made it possible for psychotherapists to treat patients who were formerly entirely out of touch with reality.

Papain—Trade needs were moderate. It was said that papain has been widely used in industry wherever there is a need to solubilize proteins. Such uses are illustrated in the beverage industry since papain digests the proteins which settle out of cold beer. Papain in powder form was used extensively for tenderizing meats where it is applied to meat before it is cooked. Enzymatic action was said to be most in evidence during the cooking of meats, since papain is relatively heat resistant.

Rauwolfia Serpentina—Research efforts, it was said, have expanded the group of effective medicinal alkaloids to be isolated from this root and hence its value is greater than ever before. Serpentina is now known to contain at least 25 alkaloids, the most widely known being reserpine, rescinnamine and yohimbine. It was noted that FDA specifications call for whole root preparations to be prepared from the serpentina species and it was reported that whole root formulations have probably been the most effective in the treatment of high blood pressure. Recent research activities have centered around the isolation of rescinnamine, an alkaloid compared favorably with reserpine in therapeutic value. This alkaloid has been marketed as a hypotensive and tranquilizing agent with less frequent and less severe side effects than have been known to occur in use of the earlier drug. It was remarked that intensive experimentation with species other than serpentina were made necessary when a ban on root exports from India, since lifted, was put into effect in 1954. Investigations led to the discovery of 19 different species of rauwolfia containing reserpine in varying amounts, the most promising being vomitoria and heterophylla.

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Philadelphia Drug Exchange Re-elects Durst President

Philadelphia Drug Exchange has re-elected Richard L. Durst of S. F. Durst & Co. as its president for 1957. Renamed vice-president of the organization is Robert L. McNeil of McNeil Laboratories. J. Mervin Rosenberger, formerly of Smith, Kline & French Laboratories, was re-elected secretary and treasurer. Dr. Charles E. Vanderkleed is consultant to the group, while Walter W. Beachboard is its counsel.

Chemical Specialties Gets License to Sell Reserpine

Chemical Specialties Company, Inc., New York, has been granted a license by Ciba Company to sell reserpine, once again making "Pronat" reserpine available to the American market. Rolf Bie, vice-president disclosed that Chemical Specialties, sole distributor of "Pronat" reserpine will make its new drug application and its master file available to its customers to facilitate preparation of their finished dosage form NDA's.

Bids Wanted

Aluminum oxide, 20,000 lbs., inv. 23764, Jan. 30, Govern. Printing Office, Purchasing Agent, Washington, D. C.

Carbon dioxide, 50,000 lbs., liquid, as required during the period Feb. 2, 1957 through Jan. 31, 1958, inv. 24, Jan. 29, Oxnard AFB, Procurement Office, Oxnard, Calif.

Ethyl alcohol, 5,280 gals, special denatured, formula 3A, 5% methyl, inv. 91, Jan. 29, Atomic Energy Comm., Paducah Area Office, P.D.B. 1213, Paducah, Ky.

Nitric acid, 325,000 lbs., fuming tech., type III A, inv. 765, Feb. 1, Purchasing & Contracting Officer, Topeka AFD, Topeka, Kans.

Paint, 660 gals. exterior traffic paint, 732 gals. titanium-lead-zinc and oil exterior paint, inv. RIT-93720-R, Jan. 31, 1,950 gals. syn. enamel thinner, inv. RIT-93189-R, Jan. 29, Gen. Services Adm., Fed. Supply Service, Region 3, 7th & D Sts., S.W., Washington 25, D.C.; 6,300 gals. exterior and interior gloss enamel, class A, inv. (4)-1243, Feb. 8, enamel, inv. (4)-1267, Feb. 7, 5,635 gals. rubber base paint, 3,264 qts. phosphorescent paint, small business only, inv. 1324, Feb. 13, 488 kits vinyl resin lacquer paint, 1,373 pails heat resisting paint, inv. 1323, Feb. 13, 42,000 gals. paint remover, small business only, inv. 1321, Feb. 13, Gen. Stores Supply Office, Navy Dept. 700 Robbins Ave., Phila. 11, Pa.

Trichloroethylene, 198,000 lbs., tech., inv. 6700-4, Feb. 8, Commanding Gen., Navy Dept., Marine Corps Supply Center, Albany, Ga.

FDA Takes Action

—Continued from page 3

mann-La Roche, Inc., color manufacturer of Nutley, N. J., would exempt the same vegetable colors and "identical compounds produced by chemical synthesis, without change of chemical structure." This proposal would exempt synthetic carotene from certification—a color used in butter and oleomargarine. Under the FDA proposal it would be certified.

According to the required procedure for amending the regulations, the Commissioner of Food and Drugs invites interested persons to present their views on the above proposals. Thirty days is allowed for presentation of written comments. These should be submitted in quintuplicate, addressed to the Hearing Clerk, Department of Health, Education, and Welfare, Room 5440, Health, Education, and Welfare Building, 330 Independence avenue, S. W., Washington 25, D. C.

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Purchasing Agents' Optimism Continues

—*Continued from page 5*

they see ahead is frustrated by advancing prices.

Purchasing executives continue to limit their forward coverage, particularly on production and MRO items.

As has been the case for many months, employment remains high and steady.

Commodity Prices

Prices have resumed their upward spiral. The leveling trend that was reported in the last quarter of 1956 has diminished. 73 percent of those reporting say they are paying more for the material they buy and none say prices are lower. A number of purchasing executives have expressed the opinion that, while the government's current tight money policy poses many problems, they believe it is a sound move for the nation's economy. They state that, for the near period ahead, inflation will continue to be the problem and, in the next few months, they look for prices to continue to move slowly upward.

Inventories

Following the pattern of the previous two months, inventories of purchased materials again are reported on the high side, with 31 percent reporting increases, against 20 percent who state they are lower than last month. The percentage reporting inventories the same is unchanged. The general feeling remains that the slight build-up is primarily a reflection of a temporary drop in new orders and production.

Employment

Very little change is reported this month in the employment figures. Those indicating greater employment remained the same as last month, 17 percent, while those saying it is the same as last month dropped only two points, from 70 percent to 68 percent. Many part-time employees hired for the holiday season have been released and the general consensus is that employment will not fluctuate much for the next ninety days.

Buying Policy

Again, as for the past two months, purchases of production materials are definitely limited to the short-term range. Some 66 percent of our reporting members say they are keeping commitments to sixty days or less. There is some extension to ninety days on items in short supply or where longer lead time is required by mill schedules.

MRO requirements are also being limited to immediate needs, with 65 percent of the buyers staying within the hand-to-mouth to thirty-day range.

A slight drop in lead time for capital expenditures is noted, as the 66 percent in the 120 days-and-over category last month tapered off to 60 percent this month.

Specific Commodity Changes

As might be expected, most petroleum products show general price increases. Recent freight rate hikes are also strongly reflected this month.

On the up side are: Nickel, some steel items, dyestuffs, formaldehyde, methanol, raw sugar, coke, coal, fuel and other oils, gasoline, freight rates, light bulbs, paints, and cement.

On the down side are: Brass, some copper items, tin, selenium, and lumber.

In short supply are: Nickel, Structural and numerous other steel items, stainless, monel, cellophane, some items of electrical equipment.

Chlorine Industry

—*Continued from page 7*

purposes for 1957 will be about equal to the total capacity in the US when the institute was formed. In these days of such tremendous industrial activity, that amount is an inconsiderable part of the total production, but the tonnage stands between most of the inhabitants of the country and the many water-borne diseases," the speaker pointed out.

A highlight in the program was a panel discussion, "Atomic Energy As a Future Factor in the Chemical Industry," moderated by Walker L. Cisler, president of Detroit Edison Company, Detroit, Mich., who was joined by Dr. R. H. Boundy, vice-president and director of research for Dow Chemical Company and R. W. Thomas, vice-president in charge of research and development for Phillips Petroleum Company, Bartlesville, Okla. Sub-topics were, "Power Generation," "Chemistry Involved in Preparation and Recovery of Radioactive Fuels" and "The Application of Radioactivity in the Chemical Industry."

The meeting also marked the election of the following directors:

Carlton Bates, president, Solvay Process Division, Allied Chemical & Dye Corporation, New York.

J. R. Donald, president, Western Chemicals, Ltd.

D. W. Drummond, executive vice-president, Olin Mathieson Chemical Corporation, New York.

Fred C. Shanaman, president, western division of Pennsylvania Salt Manufacturing Company, Philadelphia.

Clark B. Shepherd, manager, chlorine products division, electrochemicals department, E. I. duPont deNemours & Co., Wilmington, Del.

Arthur F. Smith, sales manager, Westvaco Chlor-Alkali Division, Food Machinery & Chemical Corporation, New York.

Wesley H. Sowers, executive vice-president, Frontier Chemical Company, Wichita, Kan.

John S. Coey, eastern sales manager, Hooker Electrochemical Company, Niagara Falls, N. Y.

DCAT Urges Its Members To Employ School Teachers

The New York Board of Trade's Drug, Chemical and Allied Trades Section last week urged its 400 member firms, located in the New York metropolitan area, to employ high school science teachers during next summer's vacation period.

"A thorough investigation of this program, which was instituted by the New York City Board of Education three years ago, discloses that it makes a valuable contribution to both industry and the teaching profession," J. David Hayden, chairman, stated.

"Its effect is to stimulate renewed interest and enthusiasm in scientific subjects among teachers, that is readily communicated to and shared with their students. This revitalized interest will eventually result in furnishing the drug and chemical industry with more trained scientists," he added.

Eastman Adds

—*Continued from page 5*

also completed at Tennessee Eastman Company, Kingsport, Tenn., for processing and compounding special formulations of "Tenite" polyethylene, employing the basic resin manufactured at the Texas plant. These facilities also enable Eastman to apply its experience and know-how in color work, which extends back over twenty-five years, to polyethylene, which has generally been regarded as primarily a translucent white plastic.

The increases in Eastman's productive facilities are in response to the favorable acceptance of "Tenite" polyethylene. The product has already firmly established itself in such widely diversified fields of use as extruded film for packaging applications, molded articles for household uses, squeeze bottles for cosmetics and foods, extruded pipe, and formulations for electrical wire and cable coatings.

Sulfur Pilot Plant Projected in Canada

—Continued from page 3

oxygen flash smelting gases and recently paved the way for a large increase in the manufacture of sulfuric acid.

The joint pilot plant in which Texas Gulf Sulphur will investigate sulfur recovery processes will be built near the site of Inco's new iron ore recovery plant. It will consist of two sections, one for scrubbing and cleaning gas and one for reduction of the sulfur dioxide to elemental sulfur.

The investigation into the feasibility of the project may extend for several years. If the pilot plant findings indicate that commercial production of sulfur at Copper Cliff is economically possible, plans will be formulated for production by Texas Gulf on a basis of many hundred of tons of sulfur per day.

Canadian imports of elemental sulfur are on the order of 370,000 tons per year, the bulk of it being used by the pulp and paper industry. The latter industry is also the market for the liquid sulfur dioxide now made at Copper Cliff, which has replaced some of Canada's sulfur imports although its use is delineated by shipping limitations.

The Inco iron ore recovery plant was built to recover high grade iron ore from iron sulfides contained in the Sudbury nickel ores. As a result of the process used for roasting the iron sulfides, the recovery of sulfur, as sulfuric acid or elemental sulfur or in other useful forms, becomes technically possible whenever the economics of such recovery permit.

Such sulfur recovery would further reduce the amount of sulfur dioxide liberated to the upper atmosphere at Copper Cliff, it was pointed out. Any gas not subjected to a recovery process will continue to be dispersed from the plant's 637 foot chimney, the tallest smelter chimney in the world.

The fluid bed roasting process used in the Inco plant, the first $19 million unit of which went into operation last January, yields sulfur dioxide gas highly suitable for the production of useful by-products. This development, plus recent improvements in the technology of sulfur dioxide reduction to elemental sulfur, has resulted in the decision by Inco and Texas Gulf to advance experiments to the pilot plant level with the objective of further utilizing the elemental sulfur potential at Copper Cliff.

Natural gas, when it becomes available, will be among the reducing agents investigated by Texas Gulf in the pilot plant, along with propane gas and heavy fuel oils.

The Inco iron ore recovery process makes available a rich and steady supply of sulfur dioxide-bearing gas that permits more efficient and economical manufacture of sulfuric acid than is possible using gas drawn from conventional hearth roasters.

A portion of this gas will be delivered to a new $3 million acid plant to be erected by Canadian Industries, Ltd., adjacent to the Inco operations. The sulfuric acid, to be recovered by the contact process, will be shipped by tank truck to mining companies in the Blind River area for leaching ore in the extraction of uranium. Contracts signed to date provide for delivery at the rate of approximately 100,000 tons of acid per year, beginning early in 1958.

Arrangements for the recovery of sulfur from smelter gases at Inco are of more than thirty years standing. The arrangement with Texas Gulf gives promise of a substantial advance towards the objective of utilizing as large a portion of the sulfur content of Sudbury ores as possible, it was pointed out.

Glycerine Association

—Continued from page 5

Potts, of Armour & Co., Chicago, told the association. Considering the small budgets and the lack of capital after the war it is truly remarkable how strong research has returned to an important place in the fatty acid industry, Mr. Potts observed.

Other observations he made in Europe follow:

"The demand for pure fatty acids, and for the tailor-made blends of fatty acids has increased in recent years and manufacturers have revived their interest in the separation of fatty acids by fractional distillation. Fractional distillation units still account for only a small amount of the total distillation capacity in Europe today but most of the recently built stills are provided with fractionating columns.

"Europe has more plants for manufacture of fat alcohols than we have. Our tonnage may be greater, but the number of plants in Europe has led to more diversified production methods. There are at least four different commercial methods using high pressure hydrogenation.

"Among the new chemicals produced by European fatty acid manufacturers are nitrogen containing chemicals. Swedish and French firms have offered limited quantities of amide, amines, etc.

"While fatty alcohol sulfates, igepons, amides, etc., are mostly of European origin, they have not replaced soap in Europe to the same extent that they have in the United States. Production of petroleum based detergents are on the increase and new plants have been built in England, Belgium, France, Holland, etc., and more are planned.

Sodium Molybdate

—Continued from page 4

Because of these results, this year some 100,000 acres in these two areas alone are expected to be treated.

On the Washington-Idaho soils where sodium molybdate was used last year, the application rate was one pound per acre. The molybdenum compound was applied either alone as a water solution, or mixed with gypsum (one pound sodium molybdate per 100 pounds gypsum) or with gypsum and IPC weed-killer.

Mr. Innes emphasized that although the Pacific northwest is the area with the greatest immediate growth potential for sodium molybdate, increasing numbers of farmers in other molybdenum-deficient sections of the country have been treating their crops with molybdenum for the past several years.

These regions are principally along the Atlantic coastal plain and the Gulf coast, but indications are that molybdenum-deficient soils are not restricted to these sections. Some purchase molybdenum-containing fertilizers; other purchase sodium molybdate for application alone, or in combination with other agricultural chemicals, depending upon the particular crops and soils involved.

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13 dms, Norda Essential Oil & Chemical Co, Keelung
15 dms, Lo Curto & Funk, Keelung
15 dms, D W Hutchinson & Co, Keelung
40 dms, Keelung
CANAIGRE ROOT—59 bgs, Vera Cruz
CANANGA OIL—3 dms, Jacoberg Overseas Inc, Tandjong Priok
4 dms, Olson Importing Co, Penang
CANDELILLA WAX—809 bgs, Tampico
CARAWAY OIL—1 bbl, Kolon Trading Co, Gdynia
4 cs, Kolon Trading Co, Gdynia
SEED—250 bgs, Greenwich Seed Co, Rotterdam
250 bgs, Louis Feth, Rotterdam
1,000 bgs, Rotterdam
CARNAUBA WAX—434 bgs, Cornelius Wax Refining, Fortaleza
556 bgs, F Henjes, Fortaleza
390 bgs, National City Bank, Fortaleza
279 bgs, Frank B Ross, Fortaleza
551 bgs, S C Johnson & Son, Fortaleza
33 bgs, Wm Diehl & Co, Fortaleza
56 bgs, Dura Commodities Corp, Fortaleza
278 bgs, M Argueso & Co, Fortaleza
77 bgs, Strohmeyer & Arpe, Fortaleza
278 bgs, Balfour Guthrie, Fortaleza
55 bgs, Biddle Sawyer Corp, Fortaleza
CASEIN—1,300 bgs, Chemical Bank, Buenos Aires
500 bgs, National City Bank, Montevideo
500 bgs, F A Close & Co, Montevideo
500 bgs, C A Sayous, Buenos Aires
CASSIA—53 bls, Karl H Landes & E Balint, Rotterdam
33 bls, R J Spitz, Rotterdam
420 bls, Borneo Sumatra Trading Co, Rotterdam
478 bls, Rotterdam
CASTOR OIL—550 tons, Brazilian Industrial Oils, Fortaleza
119 tons, G Dagen & Co, Buenos Aires
874 tons, Baker Castor Oil Co, Bombay
150 tons, Recife
CELERY SEED—340 bgs, A G Dunn, Bombay
175 bgs, Otto Gerdau, Bombay
85 bgs, Becker Mayer Seed Co, Bombay
257 bgs, M J Golombeck, Bombay
261 bgs, C M Van Sillevoldt, Bombay
174 bgs, Mincing Trading Corp, Bombay
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CHLOROPARAXYLENE—1 dm, Rotterdam
CINNAMON OIL—4 cs, Ungerer & Co, Colombo
LEAF OIL—5 dms, Dodge & Olcott, Colombo
4 dms, Volkart Bros, Colombo
QUILLS—100 bls, Manufacturers Trust Co, Colombo
150 bls, Louis Furth, Colombo
CISSITERITE—500 bgs, United Carbide Ore Co, Liverpool
CITRONELLA OIL—35 dms, Consumers Import Co, Keelung
20 dms, United Global Corp, Keelung
50 dms, Ludwig Mueller, Keelung
24 dms, Givaudan Corp, Keelung
10 dms, C T Wilson, Vera Cruz
9 dms, Stein Hall & Co, Tandjong Priok
30 dms, Lo Curto & Funk, Singapore
25 dms, Norda Essential Oil & Chemical Co, Keelung
35 dms, Keelung
COALTAR DYES—17 dms, Hensel Bruckmann & Lorbacher, Antwerp
11 dms, Hensel Bruckmann & Lorbacher, Rotterdam
12 dms, Rotterdam
COCHINEAL—63 bgs, Irving Trust Co, Vigo
COCONUT OIL—358 tons, American Trust Co, Zamboanga
25 dms, Procter & Gamble Co, Manila
656 tons, Best Foods Inc, Manila
COCONUT OIL—910 tons, Pacific Vegetable Oil Corp, Manila
610 tons, American Trust Co, Manila
300 tons, E F Drew & Co, Cebu
712 tons, Manila
CODLIVER OIL—358 dms, Arista Oil Products Co, Vestmannaeviar
COPAL GUM—67 bgs, S Winterbourne & Co, Manila
32 bgs, S Winterbourne & Co, Singapore
64 bgs, Wm H Scheel, Singapore
72 bkts, Internatio Rotterdam, Macassar
87 bkts, S Winterbourne & Co, Macassar
333 bkts, O G Innes Corp, Macassar
COPPER CYANIDE—60 dms, D Hauser, Hamburg
CORIANDER OIL—2 bbls, Kolon Trading Co, Gdynia
2 cs, Kolon Trading Co, Gdynia
CORN STARCH—920 bgs, Rotterdam
CRESYLIC ACID—100 dms, M W Hardy & Co, London
CUMIN SEED—1,000 bgs, Delano Corp of America, Khorramshahr
1,292 bgs, H D Sheldon & Co, Khorramshahr
100 bgs, Chase Manhattan Bank, Khorramshahr
28 cs, Khorramshahr
455 bgs, Louis Furth, Khorramshahr
700 bgs, Khorramshahr
CUTTLEFISH BONE—240 cs, La Goulette
DAMMAR GUM—28 bgs, Internatio Rotterdam, Singapore
30 cs, O G Innes Corp, Bangkok
20 cs, Archer Daniels Midland Co, Bangkok
70 bgs, O G Innes Corp, Singapore
128 bgs, S Winterbourne & Co, Singapore
28 bgs, France Campbell & Darling, Singapore
35 bgs, Wm H Scheel, Singapore
DEXTRIN—500 bgs, Guranty Trust Co, Rotterdam
220 bgs, Rotterdam
2,5-DICHLOROANILINE—2 dms, Rotterdam
DILL SEED—166 bgs, Meer Corp, Bombay
EARTH COLORS—800 bgs, Naftone Inc, Bremen
EUCALYPTUS OIL—10 dms, Guaranty Trust Co, Lisbon
FISHLIVER OIL—6 dms, Interocean Chemical & Minerals Corp, Yokohama
9 dms, J D Smith Interocean, Yokohama
2 dms, R S Reade, Yokohama
5 dms, Collett Week Corp, Yokohama
FUEL OIL—206,406 bbls, Paragon Oil Co, Tampico
221,726 bbls, Esso Standard Oil Co, Las Piedras
103,240 bbls, Asiatic Petroleum Corp, Punta Cardon
10,000 bbls, Asiatic Petroleum Corp, Curacao
194,000 bbls, Esso Standard Oil Co, Aruba
95,000 bbls, Esso Export Corp, Aruba
104,996 bbls, Esso Export Corp, Caripito
GALL, OX—3 dms, Van Gelder Fanto Corp, Rio de Janeiro
8 dms, F J Benkart & Co, Buenos Aires
GALLNUTS—193 bgs, Carter Moore & Co, Beirut
932 bgs, Zinsser & Co, Izmir
GARLIC POWDER—10 cs, Ludwig Mueller, Malaga
GELATIN—200 bgs, T M Duche & Sons, Havre
100 bgs, Aries Co, Havre
331 bgs, Transatlantic Animal By Products Corp, Antwerp
100 bgs, G G Lippelgoes, Hull
GHATTI GUM—114 bgs, P A Dunkel, Bombay
GINGER—183 bgs, Chase Manhattan Bank Lagos
80 bgs, Cochin
GLUE—32 bbls, Larsen Piling Corp, Hamburg
250 bgs, Jung Forwarding Co, Liverpool
PEARL—60 bgs, Tranatlantic Animal By Products Corp, Antwerp
GRAPHITE—750 bgs, Asbury Graphite Mills, Hong Kong
750 bgs, C Pettinos, Hong Kong
250 bgs, Superior Graphite Co, Columbo
250 bgs, Joseph Dixon Crucible Co, Colombo
GUAIACWOOD OIL—33 cs, John D Walsh Co, Buenos Aires
GUAR GUM—240 bgs, Morningstar Nicol, Liverpool
GYPSUM—200 bgs, A Gusmer, Liverpool
CRUDE—10,101 tons, U S Gypsum Co, Hantsport
HALIBUTLIVER OIL—23 dms, Albumina Supply Co, Halifax
HEXAMETHYLENETETRAMINE—50 dms, R W Greef & Co, Antwerp
INDIGO—67 dms, C A Haynes, Hamburg
IPECAC ROOT—10 bgs, Prentiss Drug & Chemical Co, Cristobal
IRON BLUE—46 dms, Van Oppen & Co, Liverpool
KAOLIN—1 cs, Cosa Corp, Hamburg
KARAYA GUM—246 bgs, Stein Hall & Co, Bombay
102 bgs, Max Van Pels, Bombay
60 bgs, Tragacanth Importing Corp, Bombay
261 bgs, Colony Import & Export Corp, Bombay
LACTOSE—225 dms, Chas L Huisking & Co, Liverpool
100 bgs, Chas L Huisking & Co, Liverpool
100 dms, Rotterdam
LAUREL LEAVES—133 bdls, M J Golombeck, Piraeus
LEMON OIL—8 dms, National City Bank, Vera Cruz
1 dm, Irving Trust Co, Vera Cruz
6 dms, C T Wilson Co, Vera Cruz
20 cs, Palermo
PEEL—28 bgs, Malaga
LEMONGRASS OIL—17 dms, Lo Curto & Funk, Cochin
68 dms, Van Ameringen Haebler, Cochin
11 dms, Volkart Bros, Cochin
5 dms, Lo Curto & Funk, Vera Cruz
LIME OIL—14 dms, Lo Curto & Funk, Vera Cruz
1 dm, John D Walsh Co, Port Au Prince
LITHARGE—184 dms, Eagle Picher Co, Tampico
LIVER CONCENTRATE—20 cs, Bernabo International Co, Buenos Aires
LIVERMEAL—1,214 bgs, Ovimpex Inc, Buenos Aires
LOCUST BEAN—86 bgs, Norwalk Mills, Piraeus
FLOUR—363 bgs, Stein Hall & Co, Antwerp
GUM—300 bgs, T M Duche & Sons, Genoa
1,933 bgs, J L Quesada, Valencia
160 bgs, Hanover Bank, Valencia
100 bgs, National City Bank, Valencia
100 bgs, T M Duche & Co, Genoa
716 bgs, Stein Hall & Co, Genoa
100 bgs, Valencia
MACE—56 cs, Karl H Landes & E Balint, Singapore
16 cs, Knickerbocker Mills, Singapore
7 cs, J W Phyfe, Rotterdam
14 cs, A G Dunn, Singapore
MAGNESITE—960 bgs, Smith Chemical & Color Co, Rotterdam
MAGNESIUM CARBONATE—75 cs, Chas L Huisking & Co, Liverpool
1,200 bgs, Reheis Co, Hull
CHLORIDE—20 bgs, Smith Chemical & Color Co, Rotterdam
SILICOFLUORIDE—35 cks, European Chemical Corp, Hamburg
MARJORAM LEAVES—50 bgs, Wm E Martin & Sons, Hamburg
59 bgs, Hismoco American Co, Marseille
MENTHOL—10 cs, P A Dunkel, Santos
65 cs, Magnus Mabee & Reynard, Santos
MERCURY—50 flks, Chase Manhattan Bank, Vera Cruz
100 flks, Tampico
527 flks, Cadiz
MOLASSES, BEET—8,401 tons, Chas Pfizer & Co, Havre
MONOCHLOROACETIC ACID—7 dms, General Aniline & Film Co, Bremen
MONTAN WAX—110 bgs, Rotterdam
MUSK, ARTIFICIAL—6 dms, Roure-Dupont Inc, Rotterdam
XYLENE—40 kgs, Compagnie Parento Inc, Southampton
MYROBALANS—3,652 bgs, Barkey Importing Co, Visakhapatnam
3,048 bgs, Hammond & Carpenter, Bombay
POWDER—220 bgs, Tanimex Corp, Hull
400 bgs, Olson Importing Co, Hull
NAPHTHALENE—451 bgs, American Cyanamid Co, Hull
2,322 bgs, American Cyanamid Co, Middlesbrough
1,330 bgs, Rotterdam
500 bgs, Antwerp
NAPHTHENIC ACID—2,490 bbls, Esso Standard Oil Co, Aruba
NAPHTHOL—40 dms, Crescent Chemical Co, Genoa
NICKEL SULFATE—267 bbls, Kristiansand
p-NITRO-o-ANISIDINE—20 dms, Antwerp
NUTMEG—104 bgs, L A Champon & Co, Singapore
31 bgs, J W Phyfe, Rotterdam
34 bgs, R J Spitz, Rotterdam
144 bgs, Shippers Produce Corp, Singapore
50 bls, George Lueders & Co, Rotterdam
125 bls, Shippers Produce Corp, Rotterdam
40 bls, Rotterdam
327 bgs, Rotterdam
OIL—1 dm, Olson Importing Co, Penang
OITICICA OIL—300 tons, Brazilian Industrial Oils, Fortaleza
OLIVE OIL—25 dms, Uddo & Taormina Co, Palermo
15 dms, S Capizzi & Son, Palermo
49 dms, J L Sclafani, Palermo
OPIUM—100 cs, Mallinckrodt Chemical Works, Istanbul
PALMKERNEL OIL—224 tons, E F Drew & Co, Liverpool
PAPAIN—56 cs, Chas L Huisking & Co, Colombo
49 hf chts, Meer Corp, Colombo
9 cs, S B Penick & Co, Mombasa
11 cs, Dares Salaam
PAPRIKA—355 bgs, P H Petry, Alicante
300 bgs, Brillant Spanish Paprika, Alicante
100 bgs, A G Dunn, Alicante
100 bgs, Gallagher & Ascher, Alicante
350 bgs, A A Sayia, Alicante
200 bgs, Woolson Spice Co, Alicante
645 bgs, J Weinstein, Alicante
1,460 bgs, Alicante
PATCHOULI OIL—10 cs, A Verley & Co, Penang
16 dms, J Berlage, Penang
4 dms, Antoine Chiris, Penang
8 dms, Olson Importing Co, Penang
4 dms, Kane Import Corp, Penang
PEATMOSS—600 bls, J E Bernard, Hamburg
5,235 bls, Premier Peatmoss Corp, Bremen
1,000 bls, Vuys Van Nes Nurseries, Bremen
1,600 bls, Premier Peatmoss Corp, Hamburg
2,000 bls, Lewis Intern Co, Bremen
1,000 bls, E J Lang, Bremen
750 bls, J E Bernard, Bremen
4,750 bls, Marine Midland Trust Co, Bremen
1,500 bls, C Fafard, Bremen
1,000 bls, C Fafard, Hamburg
PEPPER, BLACK—890 bgs, E H Simpson & Co, Singapore
160 bgs, J F Frank, Singapore
420 bgs, East India Trading Co, Singapore
210 bgs, Otto Gerdau, Singapore
210 bgs, Internatio Rotterdam, Singapore
266 bgs, Borneo Sumatra Trading Co, Singapore
70 bgs, C M Loeb Rhoades, Singapore
70 bgs, C Czarinkow, Singapore
70 bgs, A G Dunn, Singapore
272 bgs, Volkart Bros, Cochin
80 bgs, A G Dunn, Cochin
80 bgs, M J Golombeck, Cochin
120 bgs, C Czarinkow, Cochin
210 bgs, Far Eastern Rubber Importers, Singapore
217 bgs, Singapore
720 bgs, Cochin
560 bgs, Alleppey
WHITE—140 bgs, Mincing Trading Corp, Singapore
140 bgs, East India Trading Co, Singapore
464 bgs, Internatio Rotterdam, Singapore
80 bgs, Borneo Sumatra Trading Co, Singapore
70 bgs, C Czarinkow, Singapore
266 bgs, E H Simpson & Co, Singapore
PETITGRAIN OIL—12 dms, Ungerer & Co, Buenos Aires
PETROLEUM, CRUDE—113,549 bbls, Cities Service Oil Co, La Salina
200,355 bbls, Esso Standard Oil Co, Puerto La Cruz
225,798 bbls, Metropolitan Petroleum Corp, Bachaquero
a-PICOLINE—106 dms, Rohner Gehrig, Hull
POLLACKLIVER OIL—50 dms, Interocean Chemical & Minerals Corp, Yokohama
POPPY SEED—500 bgs, Louis Furth, Gdynia
1,000 bgs, P J Hanrahan, Gdynia
500 bgs, R T French, Rotterdam
350 bgs, Rotterdam
POTASSIUM CYANIDE—100 dms, D Hauser, Hamburg
FERRICYANIDE—100 cks, Transatlantic Chemical Corp, Hamburg
FERROCYANIDE—500 bgs, Haras Co, Rotterdam
METABISULFATE—25 kgs, A Gusmer, Liverpool
NITRATE—400 bgs, Bremen
PERCHLORATE—100 dms, C Hardy, Havre
PERMANGANATE—9 dms, R W Greeff & Co, Rotterdam
SILICATE—907 bgs, Sylvania Electric Products, Rotterdam
PRUSSIAN BLUE—46 dms, Tar Residuals Inc, Rotterdam
3 bgs, Tar Residuals Inc, Rotterdam
PSYLLIUM SEED HUSKS—340 bgs, Prentiss Drug & Chemical Co, Bombay
890 bgs, S B Penick & Co, Bombay
PYRETHRUM FLOWERS—5 bls, P H Petry, Dar es Salaam
PYRITES—241 cks, American Metal Co, Leixoes
QUEBRACHO EXTRACT—541 bgs, River Plate Corp, Buenos Aires
245 bgs, Barkey Importing Co, Buenos Aires
800 bgs, Montevideo
2,297 bgs, Buenos Aires
QUINCE SEED—185 bgs, Kaymar Associates, Khorramshahr
78 bgs, Khorramshahr
QUININE HYDROCHLORIDE—3 cs, Frank Samuel & Co, Southampton
RED IRON OXIDE—870 bgs, Reichard Coulston, Malaga
500 bgs, C K Williams Co, Malaga
653 bgs, C J Osborn Co, Malaga
1,600 bgs, Smith Chemical & Color Co, Malaga
2,000 bgs, Malaga
RICE STARCH—230 bgs, Aurora Manufacturing Co, Trieste
SAGE LEAVES—103 bls, Trieste
SAGO FLOUR—164 bgs, Manhattan Paste & Glue Co, Singapore
SANDALWOOD OIL—10 cs, J Berlage Co, Cochin
10 cs, Dodge & Olcott, Cochin
7 cs, Chase Manhattan Bank, Cochin
14 cs, Van Ameringen Haebler, Cochin
SEEDLAC—250 bgs, C H Timm, Bangkok
250 bgs, Kans Import Corp, Bangkok
500 bgs, United Shellac Corp, Bangkok
250 bgs, Capitol Shellac Corp, Bangkok
1,250 bgs, East Asiatic Co, Bangkok
250 bgs, Irving Trust Co, Bangkok
250 bgs, Gillespie Rogers Pyatt, Bangkok
250 bgs, Haeuser Shellac Co, Bangkok
500 bgs, Wah Chang Corp, Bangkok
300 bgs, P N Rowe, Bangkok
250 bgs, Bangkok
SENNA LEAVES—100 bls, Prentiss Drug & Chemical So, Tuticorin
25 bls, Meer Corp, Tuticorin
SESAME SEED—328 bgs, Royal Bank of Canada, Corinto
856 bgs, W R Grace & Co, Corinto
SHARKLIVER OIL—20 dms, Arista Oil Products Co, Yokohama
SHELLAC—168 bgs, Mantrose Corp, Bangkok
20 bgs, Mantrose Corp, Bremen
SILICA GEL—1 dm, Nova Chemical Corp, Rotterdam
SODIUM ALUMINATE—20 bgs, Terramarine Trading Corp, Antwerp
BICARBONATE—1,500 bgs, Chemical Manufacturing Co, Liverpool
CHLORITE—165 dms, Hamburg
CYANIDE—826 dms, Chemical Manufacturing Co, Liverpool
280 dms, American Cyanamid Co, Liverpool
FERROCYANIDE—400 bgs, Filo Color & Chemical Corp, Liverpool
LAURYL SULFATE—25 dms, Aceto Chemical Co, Liverpool
MONOCHLOROACETATE—24 dms, Chemo Puro Manufacturing Co, Rotterdam
SULFUR, CRUDE—10,200 tons, National Lead Co, Coatzacoalcos
TALC—1,144 bgs, C B Chrystal Co, Bombay
500 bgs, L A Salomon & Bro, Bordeaux
1,630 bgs, Charles Mathieu, Genoa
TANNING EXTRACT—300 bgs, Barkey Importing Co, Liverpool
450 bgs, Tanimex Corp, Bordeaux
TAPIOCA FLOUR—3,335 bgs, Morningstar Nicol, Bangkok
1,806 bgs, Geismar & Co, Bangkok
400 bgs, American Key Products, Bangkok
1,016 bgs, Manhattan Paste & Glue Co, Bangkok
6,135 bgs, Stein Hall & Co, Bangkok
THIAMINE HYDROCHLORIDE—5 cs, Kobe
MONONITRATE—5 cs, Kobe
TRAGACANTH GUM—82 cs, Shaui S Bahary, Khorramshahr
32 cs, Am-Iran Corp, Khorramshahr
499 bgs, Am-Iran Corp, Khorramshahr
100 bgs, Thurston & Braidich, Khorramshahr
100 bgs, Gill & Duffus, Khorramshahr
32 cs, U Simidian & Co, Khorramshahr
28 cs, Khorramshahr
TRICHLOROACETIC ACID—30 dms, Mercer Chemical Corp, Bremen
TRICHLOROETHYLENE—8 dms, Ayerst Lab, Liverpool
151 dms, Chemical Manufacturing Co, Liverpool
TUNG OIL—390 tons, C Tennant Sons & Co, Buenos Aires
137 tons, Buenos Aires
ULTRAMARINE BLUE—200 bgs, Whittaker Clark & Daniels, Hull
UMBER—504 bgs, Whittaker Clark & Daniels, Liverpool
VANILLA BEANS—25 cs, Marine Midland Trust Co, Semarang
VETIVER OIL—1 dm, Taconic Natural Oil Co, Port Au Prince
2 dms, Port Au Prince
WATTLE EXTRACT—1,069 bgs, Barkey Importing Co, Durban
1,098 bgs, Hammond & Carpenter, Durban
WHITING—1,600 bgs, Hammill & Gillespie, Hull
1,696 bgs, Smith Chemical & Color Co, Hull
800 bgs, Antwerp
WOOL GREASE—53 dms, Chemical Bank, Genoa
26 dms, N I Malmstrom, Liverpool
23 bbls, Nehls & O'Connell, Hamburg
50 dms, Hummel Chemical Co, Bremen
50 dms, Gallard Schlessinger, Bremen
ZIRCONIUM OXIDE—13 dms, Lo Curto & Funk, Liverpool

Los Angeles

ARABIC GUM—100 bgs, Port Sudan
CARAWAY SEED—150 bgs, R J Spitz, Rotterdam
CASEIN—500 bgs, Carlos A Sayoul
COPRA—4,000 bgs, Pacific Vegetable Oil Corp, Manila
2,000 tons, The American Trust Co, Cebu
2,240 bgs, Balfour Guthrie & Co, Iloilo
4,480 sacks, Cargill Inc, Manila
1,000 long tons, American Trust Co, Dumaguete
2,240 sacks, Balfour Guthrie & Co, Manila
DAMMAR GUM—84 bgs, O G Innes Corp, Singapore
EARTH COLORS—20 bgs, L H Butcher Co, Manchester
LIVER OIL—25 dms, Universal Foreign Service Yokohama
50 dms, Interocean Chemical & Mineral Corp, Yokohama
PEATMOSS—1,000 bls, Nootbaar & Co, Bremen
500 bls, John Schumacher Co, Bremen
PEPPER, BLACK—48 bgs, Internatio Rotterdam, Singapore
210 bgs, C Czarinkow, Singapore
490 bgs, Singapore
PETROLEUM, CRUDE—118,679 bbls, Union Oil Co, Vancouver
22,439 tons, The Texas Co, Singapore
24,754 tons, Wilshire Oil Co, Vancouver

POPPY SEED—50 bgs, McChintok Stern Co, Rotterdam
SEEDLAC—250 bgs, P H Rowe, Bangkok
TAPIOCA FLOUR—2,170 bgs, American Key Products Co, Bangkok
2,968 bgs, Stein Hall & Co, Bangkok

Philadelphia

BEEF EXTRACT—60 cs, Buenos Aires
BONE—2,374 bgs, Phila National Bank, Bombay
3,382 bgs, Bombay
BONEMEAL—2,275 bgs, Buenos Aires
CASEIN—500 bgs, F H Paul & Stein Bros, Montevideo
CHESTNUT EXTRACT—400 bgs, Chase Manhattan Bank, Genoa
FISHLIVER OIL—50 dms, Yokohama
GYPSUM—6,119 tons, U S Gypsum Co, Hantsport
HEXYL ALCOHOL—106 dms, Rohm & Haas, Bremen
LITHARGE—22 dms, Vera Cruz
OLIVE OIL—10 dms, Blum & Son, Buenos Aires
PEATMOSS—500 bls, E J Lang, Bremen
PETROLEUM, CRUDE—209,206 bbls, Gulf Oil Corp, Mina Al Ahmadi
112,992 bbls, Gulf Oil Corp, Las Piedras
1,099,697 bbls, Gulf Oil Corp, Puerto La Cruz
105,355 bbls, Atlantic Refining Co, Caripito
133,782 bbls, Atlantic Refining Co, Pamatacual
121,439 bbls, Socony Mobil Oil Co, Covenas
129,399 bbls, The Texas Co, Pamatacual
115,200 bbls, The Texas Co, Puerto La Cruz
QUEBRACHO EXTRACT—438 bgs, River Plate Corp, Buenos Aires
ZINC OXIDE—500 bgs, Vera Cruz

San Francisco

ANTIMONY REGULUS—10 cs, C Gitlan, Antwerp
ASBESTOS FIBER—1,500 bgs, Phila National Bank, Lourenco Marques
CARDAMOM—5 cs, H M Newhall & Co, Mangalore
CELERY SEED—87 bgs, Otto Gerdau, Bombay
COPRA—89 tons, Internatio Rotterdam, Cebu
500 tons, Pacific Vegetable Oil Corp, Manila
948 tons, Procter & Gamble Co, Cebu
89 tons, Balfour Guthrie, Cebu
589 tons, Pacific Vegetable Oil Corp, Cebu
1,000 tons, Cebu
CAKE—6,000 bgs, Pacific Vegetable Oil Corp, Cebu
2,000 bgs, Berger & Plate Co, Cebu
2,000 bgs, Manila
MEAL—2,000 bgs, Bank of California, Manila
CREOSOTE OIL—581 tons, Bermuth Lembcke Co, Kobe
MONOSODIUM GLUTAMATE—195 cs, Ajinomoto Co, Yokohama
PAPRIKA—150 bgs, Pacific National Bank, Marseille
PEPPER, BLACK—70 bgs, H M Newhall & Co, Singapore
12 bgs, Internatio Rotterdam, Singapore
RED—150 bgs, Internatio Rotterdam, Yokohama
110 bgs, Borneo Sumatra Trading Co, Kobe
100 bgs, S L Jones & Co, Kobe
100 bgs, M S Cowen Co, Kobe
PETROLEUM, CRUDE—123,000 bbls, Standard Oil Co, Vancouver
WOOL GREASE—50 dms, N I Malmstrom, Liverpool
ZIRCON SAND—5,400 bgs, Mattoon & Co, Brisbane

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Chemical Concentration

—*Continued from page 3*

an expenditure of $225,000 with the understanding that more would be provided if needed.

These studies were begun last year when Sen. Joseph O'Mahoney of Wyoming was directing the committee's work. He is no longer head of the subcommittee, however, and this post has been taken over by Sen. Kefauver by right of seniority.

It has never been made clear what the committee plans to do with the results of its studies other than to serve as a source of reference for any future action that might be desirable in the field of overall antitrust legislation. A full program of antitrust matters is being rapidly added to the committee's work schedule which indicates that it may become one of the most active committees of congress this session.

To Probe Other Prices

In addition to the overall investigation of economic concentration, the committee will inquire into recent increases in oil, gasoline and newsprint prices, and will continue studies of practices in the meat packing and automobile industries. President Eisenhower made several recommendations for antitrust law changes in his economic report last week, and these too will be before the subcommittee. They are:

- Authorize the Attorney General in civil antitrust investigations to require the production of necessary documents without the need of grand jury proceedings.
- Make Federal Trade Commission cease and desist orders under the Clayton act final unless appealed to the courts.
- Require advance notification to the antitrust agencies of proposed mergers that are likely to have a significant effect on competition.
- Extend federal regulation to cover bank mergers by assets as well as by stock acquisitions.
- Make explicit the application of the Clayton act to business mergers where either party is engaged in interstate commerce.
- Authorize the FTC to restrain mergers by means of preliminary injunctions before a complaint is filed.

Narcotic Returns

—*Continued from page 3*

slinger, Commissioner of Narcotics. The entire return, the letter explains, including summaries, may be prepared in metric terms, eliminating all conversions to ounces and grains except for the final totals which comprise quarterly and cumulative summaries.

Just recently, Eli Lilly & Co., Indianapolis, Ind., announced that it had converted all its operations—external as well as internal—to the metric system of weights and measures (OPD 1/14/57).

Lilly had already received permission from the Bureau of Narcotics to prepare narcotic reports in metric units. The bureau has long urged the adoption of the metric system for narcotics accounting.

Mr. Anslinger wrote: "Our first proposal for its use was by a letter circulated to manufacturers during the month of September, 1946, some ten years ago.

"We renewed the suggestion through trade association channels in March, 1949, and the subject was broached again in 1955 at the recommendation of a task force of the Hoover commission.

"A large segment of the trade has been anxious to secure the many advantages of metric system accounting but a number, at the time of our inquiries, were not prepared to make the change."

The bureau, while it is much in favor of the metric system, will be compelled to maintain its accounting on the present basis until at least a majority of drug manufacturers adopt and use the metric system.

Hence, Mr. Anslinger's letter pointed out, for the present, the bureau will require the extra set of summaries prepared in ounces and grains.

"When all manufacturers render returns in the metric system," the letter stated, "we will simply discontinue the extra set of summaries and the transition will be complete.

"Meanwhile, in this manner we are making it possible for each manufacturer to shift over to the metric system for records and returns at any time that suits his own convenience."

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Essential Oils, Aromatics

Materials in this market began to show some activity last week with nutmeg and almond oil moving with the greatest strength. The former, which has stood on a strong level for some time now, has of late found heavy buyer resistance because of the swift rise in prices. This has been found true in the source material market as well as that of the oil. However, the scarcity of the material persists without any hope of relief in sight and dealers must cope with the situation as it exists. The present listing on spot for nutmeg runs in a range of about $15 to $16 per pound. This is about 50c. higher than previously quoted. Almond oil climbed 15c. per pound to a $1.40-$1.45 range. Dealers attribute this to scarcity of material which in turn is attributed to the lifting of the government subsidy. Almond hungry dealers, attempting to reach past the firm situation, bought heavily into peach and apricot kernel oil stocks and brought a firm tone to that market also.

Two declines were reported on spot last week. Grapefruit oil, generally considered a weaker member of the citrus oil group which showed such vitality in the market last season, dropped 5c. per pound to $1.60 position on spot. The movement is generally considered reflective of the softening tones of the market that followed the holiday seasonal period. The other decline, a slight one, was noted in citronella oil where Ceylon material dropped 3c. per pound to an 87c. position. This was attributed to the overall condition of citronella, which has become less than a firm one. Dealers noted that previous to the development of the Suez situation, this oil had begun to show soft spot and declines in price had followed; then, momentarily, following the development of the crisis, the prices had firmed and in one instance even advanced. However, it is felt that the present listing is more reflective of the honest position of this material.

A recent London report on the market noted that essential oils are calmer with prices generally more stable following the flurry of buying consequent upon the Suez situation and the Christmas holiday season. The Suez position, it was noted, has largely been discounted and price changes now react to normal conditions. Offerings from China are now being freely made, the withdrawal of offers being short lived and prices are if anything a little easier. There are, however, a number of oils short on spot, notably bergamot which was practically all cleared off the market on news of a sharp increase at origin. Bois de rose is still short on spot and prices are at a good premium over shipment offers. There is little cinnamon leaf to be found, it was noted, but prices remained unchanged. The citronella oils in London have eased on a falling off in demand although a revival of interest was anticipated this month. The Spanish oils were quoted higher and fairly good business has been reported in Eucalyptus oil. Sicilian newcrop lemon oil is being shipped and although prices are fluctuating there is no sign of any substantial break.

Price Trends

Advanced

Oil, almond, 15c. per lb.
Nutmeg, 50c. per lb.

Reduced

Oil, citronella, Ceylon, 3c. per lb.
Grapefruit, 5c. per lb.
Vanilla beans, Bourbon, $1 per lb.
Mexican, cut, 50c. per lb.
Whole, 75c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 27, 1956
145.42	145.36	138.25	135.36

For Current Prices see Page 9

Essential Oils

Almond—This material advanced in price on spot last week, dealers here reported. The current quote of $1.40-$1.45 per pound is 15c. higher than previously listed. The tight position is attributed to the lifting of the government subsidy for this material, making the supply position very firm. A further result has been the firming of replacement material also (peach and apricot kernel oil) testifying to the demand for material in this area of the market.

Citronella—This material rested relatively easy on the market last week, dealers here reported. The current listing of 87c. per pound for Ceylon material is 3c. less than previously quoted. Heavy supply is considered a major reason for the present position of this oil. Ripples in the surface of the market appeared upon the heels of the crisis in the Middle East. Prices fluctuated and in some instances advanced but for the most part, the heavy surplus of material known to exist continued to act as a dampener upon the over all scene. The present situation is expected to continue until the supply situation slackens somewhat.

Geranium—A recent report from Europe noted that African geranium oil continued firm due to the small available stock at source. Bourbon quality geranium oil, it was said, was even firmer. Although it is reportedly difficult to obtain correct information from source, it seems that further rises are to be expected up to the time of the 1957 crop harvest.

Grapefruit—This oil, generally the weakest member of the citrus oil family, declined on spot last week, dealers here reported. The current listing of $1.60 per pound is 5c. less than previously quoted. This is in keeping with the generally less than firm tone noted throughout the citrus market.

Lavandin—A report from Europe has noted that very large quantities of this oil have been sold up to now. Despite this, it was said that the price has remained steady. No rise of any sort is expected, it was noted, unless extreme demand of some sort is placed upon the market.

Lavender—The demand for this oil, according to a report from London, has been large with about half of this year's crop already sold. This, it is suggested, may lead to a complete absence of the material from the market before the next crop is harvested. In this instance, of course, prices would become much stiffer than they have to-date as supply waned. Yet, it is suggested that the supply situation is so tight that the material will vanish from spot before the next newcrop even if the demand is even and only of an average amount.

Mimosa—The recent report from London noted that the 1957 harvest will not be an extensive one for this material but if the weather is more favorable than it was last February it will be possible to resume the manufacturing of mimosa products.

Nutmeg—This material is 50c. per pound more than previously listed and stands on spot at a range of $15 to $16. The current listing was noted by dealers last week alongside the fact that source material is listing for 15c. less than previously quoted a week earlier. However, the spice quote has been a fluctuating item for the past few weeks, having run the gammut, in a three-week period of $2.15, $2.35 and $2.20 per pound, consecutively. Whether or not the oil will be touched by these variations in the source area remains to be seen. However, since the overall picture in both markets continues to be one of firmness, there is little reason to look for any ease of either permanence or significance.

Sandalwood—London reports on conditions at source noted a recent rise in price last week. The advance is attributed to the fact that only small lots of material were sold at the November/December auction sales due to new Indian government regulations. This might possibly lead to further advances, it was said.

Aromatic Chemicals

Anethol—This material reportedly showed some ease on spot last week, dealers here reported. The current listing of $1.65 per pound is 10c. lighter than was previously quoted for NF material. Technical anethol remained at its $1.10 per pound level. The current situation is said to be resultant of an export market setback that developed because of a liberal

Essential Oils

anise oil offerings in the European market. The situation is not expected to tighten up until a quantity of the natural material is consumed on the market.

Citral—This material, according to dealers and producers on spot, continued last week to display an unsettled tone. This was attributed to recent irregular fluctuations in the basic material from which it is derived. Further movement in that area, it was said, might bring about a price shift.

Seeds and Spices

Nutmegs—This material which has been in the forefront of the strong materials in this market has begun to show signs of cracking under buying resistance against the high listings. The current position of $2.20 per pound for West Indian spot material is a decline of 15c. from the previous position. However, prior to that, the listing had been down to $2.10 per pound. The fluctuations will in all probability continue until some common ground is found between available material and the price buyers are willing to pay.

Poppyseed, one of the most volatile seeds in the spice line, will bear close watching until a new crop is harvested in the late summer and early fall of 1957. Total annual imports average 70,000 bags of 110 lbs. each from all origins with 70% usually imported here from the Netherlands. Due to last year's cold and wet summer, the Dutch crop turned out to be considerably smaller despite the fact that acreage has been largely increased and a giant crop being anticipated. In the end, however, only 3,000 tons (60,000 bags) were harvested, of which 1,500 tons (30,000 bags) were exported to all destinations including the United States in October and November.

The total arrivals in the United States' ports during the last quarter of 1956 amounted to 16,500 bags which included for the first time in many years a small exportable surplus of Danish Poppyseed. Holland, already having exported one-half its last crop, will have to fill the world's needs until September, 1957. Of course, Poland, Argentina and Turkey are also Poppyseed-growing countries. While Polish crop figures are not available, it is conservatively estimated that not more than 400 to 500 tons are exportable since Poland is a heavy consumer of Poppyseed and is also supplying other Iron Curtain countries.

The Turkish crop, as well as the new Argentine crop, which would normally be available now, have both been largely spoiled by excessive rains and both Turkey and Argentina will not have more than 100 to 150 tons each.

In conclusion, therefore, we shall have to rely upon 1,500 tons of Dutch Poppyseed, 300 to 400 tons Polish and 200 to 300 tons Turkish and Argentine Poppyseed until September, 1957. Adding these 2,200 tons (44,000) bags to the sixteen and one-half thousand bags which have already arrived, we come to a total of about 60,000 bags for the crop year, October 1, 1956 to September 30, 1957 which indicates that there is a deficiency of about 10,000 bags which is approximately 14%. Therefore, a stable market can be predicted until it becomes better known what growing conditions are going to be this season which will not be until the late Spring or early Summer.

It seems that current price levels will be maintained, particularly since importers have purchased cautiously basing their imports largely on the amount of resales made. Stocks in New York are below normal and amount to no more than 14 to 21 days' supply.

Pepper—Demand for spots and nearby positions firmed values to the extent of a penny or more. In part the possibility that the strike injunction would expire before the dock workers and the shipping companies could agree on a contract motivated interest in extending coverage. But equally important was the continued stability of prices in India. As a result of the week's business, a good part of the available supply spot and nearby has been committed. Consumption is keeping a close pace with arrivals and no real additions are being made to the reserves in N.Y. Actually it becomes clearer each day that these reserves have been whittled down by the business during December and early January. The overall picture is healthier. General optimism is only restrained by the fact that India is marketing her crop and can only do so without real competition from other sources during the next four months. Beginning in May we will have new crop Sarawak to contend with. Nonetheless, for the short term we seem to have reached a sound basis on which to work.

Vanilla Beans—The bulk of the new Madagascar Bourbon crop estimated between 300 and 325 tons is now being readied for shipment to the United States. The newcrop was offered, at the beginning of the season, at $7 per pound. Extract manufacturers found this price high and pressured the shippers in Madagascar to lower their quotations. About half the crop was sold to spot at a loss by the curers. Their holdings have now been materially reduced and as a result they are not willing to sell anymore at previous prices. Curers now demand a profit on their holdings and are very wary in making offers. If any Bourbons can be bought at all at present, manufacturers must pay a minimum of $8 per pound for good manufacturing quality and $9 for prime beans, which represents a considerable advance above previous levels. Mexicans have advanced also in the same proportion and in sympathy with the bourbon market.

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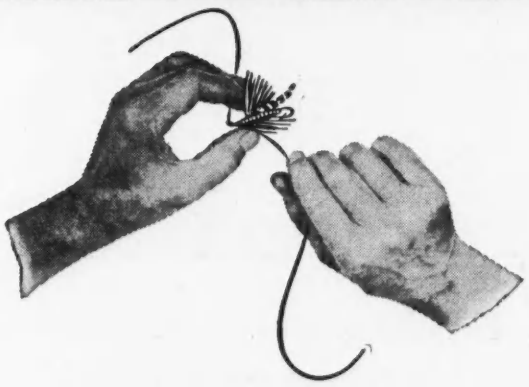

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Coatings Materials

The market position of shellac is believed to be more favorable now as a result of price declines of recent weeks. Over the past month orange grades have eased 6c. per pound to 41c. for lemon No. 1, 40c. for No. 2 and 38c. to 39c. for superfine. Although buying interest had been on the quiet side, the real cause of the price declines was attributed to conditions at source, where an exceptionally good crop year has brought supply levels higher, with a consequent easing of prices. Bleached grades declined on January 15 to 52c. per pound for bonedry and 62c. for refined in 2,500 pound lots. Often in this market lower prices have had the effect of winning customers away from competitive materials.

In casein, an unusually quiet market was taken by some dealers as a sign of renewed buyers' resistance. The unique character of the casein market, according to dealers here, is accounted for by the fact that while Argentina has a virtual monopoly on supply with the correlative privilege of determining prices, consumers are in a position to turn to soya protein whenever a high price in casein makes such a move more economical. Under these circumstances, dealers say, maneuvering on both sides of the market makes for a fluctuating business volume and frequent price revisions.

The situation in dioctyl phthalate and related plasticizers has not clarified yet. At least one producer has officially lowered its tankcar price ½c. to 28c. per pound while others were said to be meeting competition at that price without having yet officially revised their quotations. Tricresyl phosphate, though, has been moved downward 2c. per pound by all major factors in the field. The reduction was originally prompted by the need to improve the competitive position of the material in relation to phthalates. This need was revealed last year in declining production figures and sales lower than during the previous year.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan.27, 1956
100.78	100.79	100.29	100.10

For Current Prices see Page 9

Prime Pigments

Blues, Iron—Recently advanced quotations were reported steady. Carlot quantities are 52c. per pound, ton lots 53c. and less than ton lots 54c. per pound. Alkali-resisting types were raised to 57c. per pound for 23,000 pounds or more, 58c. per pound for ton lots, and 59c. per pound for 250 pound lots.

Blues, Organic — January 1 advances were steady at the following levels: Blue peacock, fugitive, 100 percent color strength, increased 5c. to 90c. per pound; victoria blue toner, PTMA, increased 20c. to $5.55 per pound, and PMA, increased 20c. to $4.50 per pound. Market was seasonably quiet last week, with supplies ample for all consumer needs.

Chrome Colors — Seasonally normal sales were reported, with quotations steady at recently advanced levels. CP green chrome was made 2c. per pound higher at the first of the year, ranging 42c. per pound for most grades. Varieties with high blue content are 43c. and 46c. per pound. Chrome yellow was advanced 1½c. per pound to 35c. per pound. Zinc chromate was also moved up 1½c. per pound, making the price 34c. per pound, and the price of zinc yellow 29c. per pound.

Lead Pigments—Price listings were held steady against a seasonable volume of business. Carlot quotations of red lead are 19c. per pound for 95 percent material, 19.2c. per pound for 97 percent, and 19.35c. for 98 percent. Orders in less than carlot quantities are 1c. per pound higher. Selling prices of white lead in carlots are 19c. per pound for basic carbonate, 17¾c. for silicate and 17¼c. for sulfate.

Zinc Pigments—The tone of the market was still steady, pricewise and in business volume. Supply levels were judged adequate to meet consumer needs. Quotations have been unchanged since last April at the following levels:—American process, lead-free, 14½c. per pound; leaded, 35 percent, 15½c.; 50 percent, 15⅞c.; French process, green seal, 15¾c.; red seal; 15¼c., and white seal, 16¼c. Quotations in less than carlots are 1c. per pound higher.

Lacquer Materials

Dicyclohexyl Phthalate — Advanced prices of October 1 have been firmly maintained. Quotations on lump material are 58c. per pound for carlots and 59c. per pound for less than carlots. Prices of granular are 1½c. higher. The market eased off in December but has moved ahead briskly since then. Ample supplies are available.

Dioctyl Phthalate—This plasticizer is selling in tankcars at a range of 28c. to 28½c. per pound as a result of the recent ½c. reduction posted by a major manufacturer. Several other producers were said to be inclining toward the lower price but no official action along this line was reported.

Fillers and Inerts

Asbestos—November shipments of raw material reached the highest peak of the year, but in December shipments were at a greatly reduced level because of a normal decline in inventory buying. An informed estimate places total shipments for the year approximately ten percent below the level of the previous year. Current market conditions are said to indicate that sales in 1957 will be approximately equal to the volume of business in 1956, or possibly somewhat better. Because of the tight money market, housing starts are expected to continue at the modest pace of the past few months. The forecast for automobile production is that it will remain at least as high as during 1956.

Asphalt, Gilsonite—Advanced prices of January 1 have been firmly held. These advances, $3 per ton for all grades, were prompted by rising costs at the mill. The new schedule lists jet black material at $40 per ton. Gilsonite with a fusing point of 270 to 295 degrees fahrenheit is also $40 per ton, while high fusing point material sells at $41 per ton. The price of seconds is $35 per ton.

The market is slow right now because of the seasonal decline in outdoor construction work. Supplies are at moderate levels but will increase as producers boost output in anticipation of the Spring market.

Synthetic Resins

Alkyds—Since the first of the year demand has varied between moderate and good. For some buying outlets the present period is a breathing spell between high production seasons. Alkyd sales during the quarter will to a large extent fluctuate with the pace of automobile production. The outlook in automobiles is generally thought to be favorable, although obrervers are tempering their optimism with recognition of the fact that credit for installment buying has become tighter.

Prices advanced ½c. per pound with the first of the year in response to increased costs of raw materials and containers. The advanced quotations have been firmly maintained.

Natural Resins

Gum—Freight rates on routes from the Far East will be advanced about 15 percent in February, causing replacement costs to rise between ¼c. and ½c. per pound. If market conditions warrant it, these increases will be passed on to consumers. Meanwhile, prices are steady and unchanged against a moderate volume of buying interest, which in the main is restricted to prompt requirements. Recently revised quotations were firmly maintained on the following materials:—Manila C and DBB copals 35½c. and 26c. per pound, respectively; East India black nubs and chips, 11½c. to 13c. per pound, Singapore No. 3 dust, 16c. to 18c. per pound.

Shellac—The market position of shellac is said to be improved as a result of the

Coatings Materials

substantial price declines of recent weeks. Over the past month, orange grades have slipped 6c. per pound to 41c. per pound for lemon No. 1, 40c. per pound for No. 2, and 38c. to 39c. per pound for superfine. Although buying interest has been on the quiet side, the real cause of the price declines is attributed by dealers to conditions at source. An exceptionally good crop year has caused supplies there to mount with a consequent easing of prices. Bleached grades declined on January 15 by 2c. per pound, to 52c. per pound for bone-dry and 62c. per pound for refined. These quotations are for bags in 2,500 pound lots.

Miscellaneous

Casein—Buying interest in Argentine material was sparse, dealers reported. Offer prices are 22½c. to 23c. per pound for February shipment, duty paid. Limited quantities of New Zealand were available for later shipment, while French and Danish material was unavailable.

Stearates—These materials were moving well last week at prices that were advanced 2c. per pound a week earlier. The advances were accounted for by increased costs in stearic acid, labor, containers and miscellaneous raw materials. Previous prices had been maintained over a long period of time. Under the new schedule aluminum stearate is 39c. per pound in carlots and 40c. to 44c. per pound in smaller shipments; barium stearate is 41c. per pound in carlots and 42c. to 46c. per pound in less than carlots, while calcium stearate is 39c. per pound in carlots and 40c. to 44c. per pound in less than carlots.

Naval Stores

Production of gum naval stores in December totaled 9,180 barrels of turpentine and 35,810 drums of rosin, according to the monthly report of the Department of Agriculture. Seasonal production through December 1956 declined four percent from the corresponding period of the previous year, the Department reported. Wood turpentine production reached 38,250 barrels, a decline of 3,300 barrels from the previous month, and 4,500 barrels below December 1955. Steam distilled rosin production totaled 106,940 drums, bringing

—*Continued on page 67*

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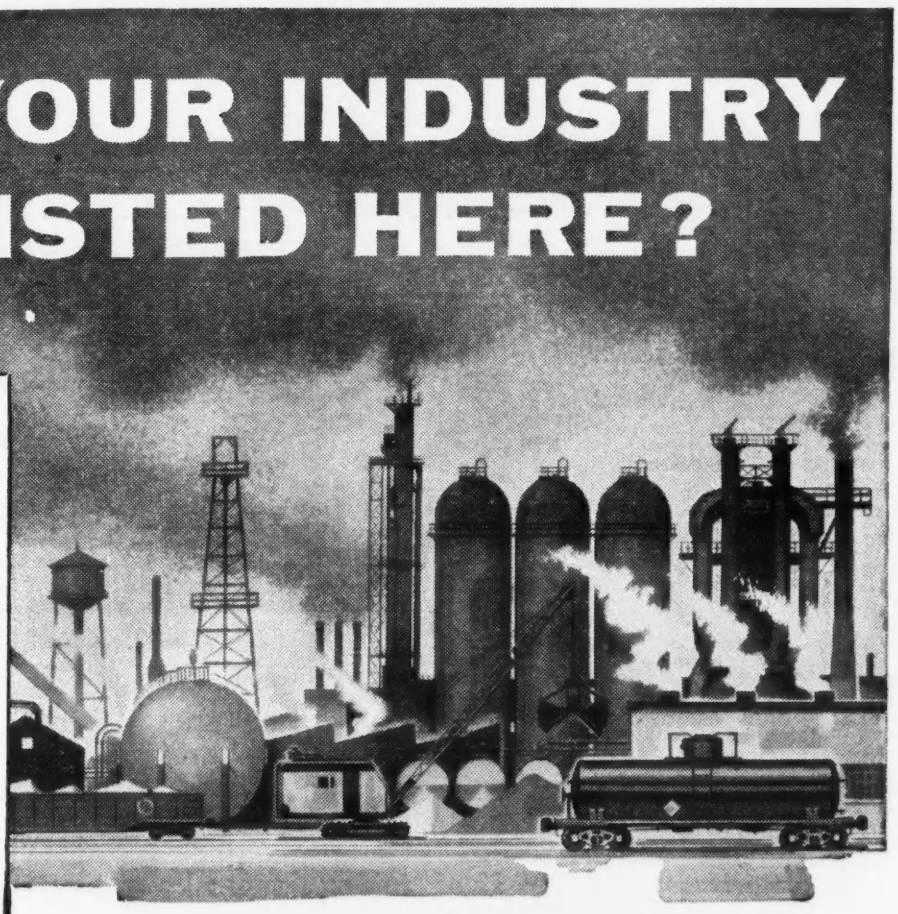

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Oils, Fats and Waxes

Slackened export interest in edible oils created an easier tone in this market. Domestic business was limited to prompt needs. Peanut oil was weak and dropped one and half cents per pound. Cottonseed oil also was weaker and declined drastically. Corn oil was unchanged, but offered more freely. Soybean oil was irregular and slightly lower. Crude coconut oil continued unsettled with sales at slightly lower quotations. Copra was unchanged and nominal.

Tallow and greases were weak with moderate business reported for export and domestic account at lower levels. Lard was dull and easy. Oleo oil and stearine were in limited supply and well held. Lower cost of palm oil replacements was reflected in the spot market. Prices were reduced fractionally for spot and forward delivery. Trend in tung oil prices continued downward with good volume of business transacted at sharply lower levels for prompt and forward delivery. Linseed oil was inactive, but crushers readjusted quotations slightly upward. Brazilian castor oil was firmer and trading was quite active at unchanged prices. Domestic grades also were in better request and quotations were raised ½ cent per pound. Trading in crude menhaden oil was at a standstill, but the market remained steady. Refined fish oil was in good request for small lots for actual needs. Firm bids could have shaded tankcars. Interest in oiticica was fair with light sales reported at prevailing quotations.

Quiet demand for carnauba wax has unsettled the market. Selling pressure increased and sizable lots were available at concessions for most grades. Yellow Parnahyba was reduced 4 cents per pound, while yellow Ceara was unchanged at the sharp reduction of the previous week. Candelilla was stronger due to the uncertainty of obtaining replacements from Mexico because production has been reduced by drought.

Price Trends

Advanced

Acid, linseed, 1/10c. per lb.
Oil, castor, dom., ½c. per lb.
Linseed, 1/10c. per lb.

Reduced

Copra, $1.50 per ton.
Greases, ¼c. per lb.
Lard, cash, 1/10c. per lb.
Linseed meal, $1 per ton.
Oil, coconut, crude, ⅛c. per lb.
Cottonseed, crude, ½c. per lb.
refd., ½c. per lb.
Palm, ¼c. per lb.
Peanut, crude, 1½c. per lb.
refd., 1½c. per lb.
Soybean, crude, ¼c. per lb
refd., ¼c. per lb.
Peanut meal, old proc., $1 per ton.
Tung ½c. per lb.
Tallow, ined., ¼c. per lb.
Wax, bees, Afr., crude, 1c. per lb.
Carnauba, yellow, Phyba., 4c. per lb.
Japan, 1c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 27, 1956
121.17	120.88	121.02	103.92

For Current Prices see Page 9

Vegetable Oils

Castor—Trading was reported improved for nearby and later delivery. Market was firmer and domestic grades were raised ½c. per pound. Brazilian oil also was strong with trading on the basis of 22¼c. per pound, tankcars, New York, prompt delivery.

Coconut—This market continued easy. Crude was lower with sales at 11c. and 11⅛c. asked, tankcars, f.o.b. Pacific coast, prompt shipment. Tankcars were nominal at 12⅜c., New York basis.

Corn—Trading in crude was noted at 15c. per pound, tankcars, f.o.b. mills. Refined was held at 18.66c. per pound, tankcars, New York, prompt delivery.

Cottonseed—Futures were easier last week declining fractionally for all positions. The market reflected the lack of export interest, combined with slow domestic business. Trading was chiefly professional with trade participation limited. Easiness in allied markets was a contributing factor. Trading in cash oil was light. Refined salad was lower and quoted at 18c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed also was weak and dropped sharply. Tankcars were quoted at 14¼c. f.o.b. mills, in the southeast, Valley, Lubbock and 14½c. in Waco.

Cottonseed crush in December was indicated at 570,018 tons by the Census Bureau, compared with 676,699 in November and 6,721,452 tons, December, 1955. Total crush August through December amounted to 2,676,449 tons against 2,867,672 during same period a year ago.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, January 25, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar.	298	17.06	16.37	16.66@16.70
May	572	17.10	16.48	16.79S
July	478	17.06	16.42	16.71S
Sept.	111	16.90	16.30	16.45@16.51
Oct.	94	16.15	15.91	16.05S
Dec.	81	16.20	15.63	15.99S
Mar. (1958).	3	16.05	15.90	15.80@16.00

Total sales and switches, 1,637 contracts.

Linseed—Trading was reported confined to actual needs. Raw oil price schedule was raised slightly to 13½c. per pound, tankcars, Minneapolis, January-February delivery. Consumers continued to take sizable lots of oil against former contracts.

Minneapolis.—Dullness prevailed in linseed oil market, users apparently having satisfied nearby requirements in recent weeks at lower prices. Crushers advanced prices 1/10c. to 13.5c. a pound, raw, in tankcars, f.o.b., Minneapolis. Warehouse pricing basis was at 13.8c. Withdrawals against existing contracts were accelerated as paint industry prepared for spring business.

Shipments of linseed oil, in pounds, were as follows:

	1956-57	1955-56
Past week	6,660,000	7,800,000
Since Sept. 1	143,520,000	140,700,000

Flaxseed—Flaxseed crushed in December amounted to 2,666,244 bushels bringing the total to 12,058,461 bushels, August through December.

Stocks of flaxseed on farms totaled 21,970,000 bushels, January 1, against 16,796,000 bushels, January 1 last year.

Minneapolis.—Cash flaxseed market was flat, offerings extremely limited and crushers not aggressively seeking supplies. Bids held at $3.40 for the fourth consecutive week, although small lots traded at a few cents premium. Most plants resumed flaxseed crushing but apparently had suficient supplies for nearby needs. There were indications that final figure on flaxseed under the loan program would be appreciably higher than the December 15th report. Only 10 cars of flaxseed were offered in the cash market, while to-arrive bookings amounted to 29 cars and 15,000 bushels. Arrivals for all accounts totaled 177 cars, compared with 594 cars a year ago. Shipments amounted to 25 cars, against 153 last year.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments
	1956-57	1955-56	1956-57
Past week	318,600	1,039,500	45,000
Since Sept. 1	14,572,000	16,607,850	1,920,000

Oiticica—Consuming interest was limited to prompt needs. Tankcars were unchanged ranging from 15¾c. to 16¼c. per pound, New York prompt and later delivery, according to seller. Drums ranged from 17¼c. to 17½c. per pound, spot as to quantity.

Olive—Small lot trading was reported for spot delivery. Spanish oil was held at $3.50 to $3.60 per gallon, drums, duty paid, spot as to seller. Tunisian oil was quoted at $3.25 to $3.30 per gallon, duty paid, ex-dock. Offers from Spain were still unavailable.

Palm—Prices were easier, off ¼c. Drums were lower at 15½c. to 16½c. per pound, spot as to quantity. Tankcars also declined to 13¼c. per pound, New York, February-March delivery.

Peanut—This market continued weak and dropped sharply. Crude sold down to 15½c. per pound, tankcars, f.o.b. mills, January through March delivery. Refined oil was reduced to 18¾c. per pound, tankcars, New York basis.

Rapeseed—Moderate sales were reported at 18¾c. per pound, tankcars, New York, prompt delivery. Market remained steady.

Soybean—Market was unsettled and declined ¼c. per pound. Trading was slow for domestic and export delivery. Crude was sold at 14½c. per pound, tankcars, Decatur, January; 14c., February; 13⅝c. asked, March and 13⅜c. sales, April. Refined salad was lower at 17.21c. per pound, tankcars, New York, prompt delivery.

Soybeans crushed in December were re-

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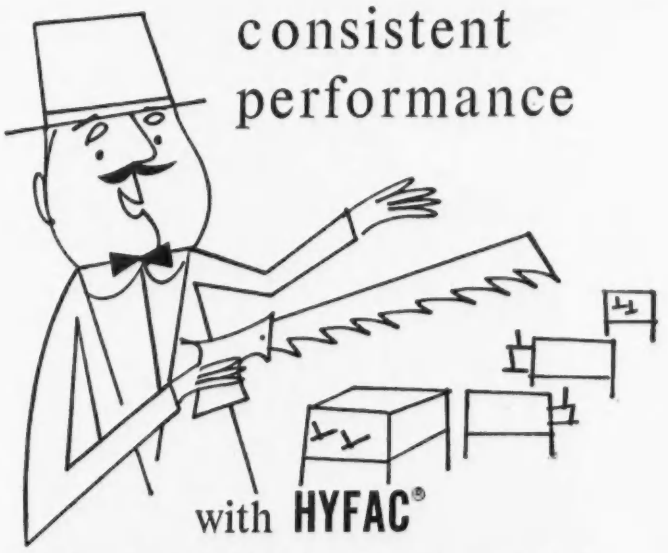

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F.F.A. (% as Oleic)	102—105	103—105	103—105	103—105
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Oils Fats and Waxes

ported at 26,987,000 bushels by the Census Bureau, compared with 26,590,000 bushels, November and 23,868,000 bushels, December, 1955. Total crushed October through December amounted to 81,505,000 bushels against 74,359,000 bushels for the same period a year ago.

Stocks of soybeans on farms totaled 168,949,000 bushels January 1, compared with 116,602,000 bushels, January 1 last year.

Soybean Oil Futures

Sales and prices of crude soybean oil futures (new contract) in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, January 25, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar.	8	13.64	13.55	13.64S
May	10	13.31	13.02	13.21@13.30
July	12	13.17	12.97	12.97@13.00
Sept.	3	12.85	12.50	12.50S
Oct.	1	12.27	12.27	12.09@12.25

Total sales, 34 contracts.

Tung—Trading was quite active last week for prompt and forward delivery on a scale downward. Sales were reported down to 22c. per pound, tankcars, New York for January-February delivery and 21¾c., March forward delivery. Drums declined to 23½c. per pound, carlots and to 24c. for smaller lots. Domestic oil was lower but maintained 22½c., tankcars, f.o.b. mills.

Miscellaneous

Castor Beans—This market remained firm. Shipments were nominal around $185 per ton, f.o.b. Brazilian port.

Imports of castor beans, and castor oil at New York and Philadelphia last week were as follows:

	Beans	Oil
	Pounds	
Last week		3,386,000
Previous week	567,600	2,310,000
Corresponding week, 1956	198,000	908,000
Total this year	2,715,600	9,126,000
Corresponding period, 1955	7,181,600	6,014,000

Cocoa Butter—Demand was confined to small lots. Prices were unchanged at 66c. to 70c. per pound, spot, as to quantity.

Copra—Shipments were quoted nominally at $152.50 per ton, c.i.f. Pacific coast. Trading was reported spotty.

Fats and Greases

Greases—Trading was reported confined to actual requirements. Market was lower with tallow. Choice white declined to 8⅛c. to 8¼c. per pound, tankcars, delivered, according to quality. Yellow grease ranged form 6⅝c. to 6¾c. per pound, tankcars, as to seller.

Lard—Business was reported spotty. Cash lard was easier. Drums were held at 15.55c. per pound, Chicago.

Oleo Oil—Offers were reported light. Buying interest was also spotty. Extra was more or less nominal at 19½c. per pound, drums, prompt delivery. Oleo stearine was maintained at 14½c. to 15c. per pound, drums, according to quantity and seller.

Tallow—Buying interest was chiefly for export. Moderate business was reported at lower levels. Sales in bleachable fancy were reported at 7⅝c. per pound, tankcars delivered. Prime was quoted at 7⅜c.; special, 7c. and No. 1, 6⅝c., same basis. Guaranteed fancy was offered at 9⅛c. per pound, drums, f.a.s. but shadable on firm bids.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, January 25, follow:

	Sales	High	Low	Close
		Cents per pound		
July	1	8.05	8.03	7.98@8.00

Total sales, 1 contract.

Fish Oils

Cod—Light trading was reported on the basis of 10⅝c. per pound, drums, exdock, prompt shipment. Market was steady. Stocks on spot were quoted at 11⅝c. to 11¾c. per pound, drums, as to quantity.

Menhaden Crude—Trading was quiet. Market was more or less nominal around 9½c. per pound, tankcars, f.o.b. works. Light pressed oil was offered at 11½c. per pound, tankcars, New York and shadable.

Cake and Meal

Cottonseed Meal—There has been very little activity in this market. Buyers seem to be well covered for near-by requirements. Prices were steady for fourty-one percent old process at $56.50 per ton, sacked lower Mississippi Valley area; $57 Memphis; $62 Alabama-Georgia; $61.50 South Carolina mills for February shipment.

Linseed Meal—Prices unsettled, off $1 per ton. Demand was less active.

Minneapolis. — Linseed meal market eased somewhat as crushers resumed operations and demand lagged. Open quotations were steady to 50c. less. Crushers quoted extracted linseed meal, 36 percent protein, at $53 to $54 for February, $52 to $53 for March forward. Round lots could be traded at $1 to $1.50 less for nearby. Re-sale offerings applied pressure, some available as low as $51.50. Shipping directions were moderately slower. Expeller

—Continued on page 63

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Data Offered

Wet Ground Mica Association has issued a new technical bulletin (No. 29) dealing with "Studies on the Sedimentation Characteristics During Storage of Pigmented Organic Coating Materials." The studies are conducted by Morton Rezak and Fred Heise, jr., under the direction of Dr. Max Kronstein of New York University. The bulletin is available without charge to the paint industry from the association, 420 Lexington avenue, New York 17.

"Pydraul AC," a fire and explosion resistant fluid developed by Monsanto Chemical Company specifically as a lubricant for air compressors, is the subject of a technical bulletin published by the company. Physical properties of the fluid and instructions for the conversion of compressors to its use are contained in technical bulletin No. 0-133 available on request to Monsanto's organic chemicals division, 800 North Twelfth boulevard, St. Louis 1, Mo.

A four-page brochure telling the story of **"Paraflint,"** the new synthetic paraffin imported from South Africa, has been prepared by Moore & Munger, 33 Rector street, New York 6, exclusive distributor of the material in the United States and Canada.

How corn syrups and sugars are made and used is described in a new forty-eight-page illustrated booklet, "Corn Syrups and Sugars," recently published by Corn Industries Research Foundation. The second in a special series on the major products of the corn-refining industry, the booklet covers manufacturing processes, physical, chemical and other properties, recommended handling equipment and procedures. Copies are available in limited quantities without charge from the foundation at 1001 Connecticut avenue, N. W., Washington 6, D. C., or at 3 East 45th street, New York 17.

Oils, Fats and Waxes

—Continued from page 62

meal, 39 percent protein, held at $69 for February forward.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	13,500,000	19,680,000
Since Sept. 1	304,740,000	358,690,000

Peanut Meal—Export business coupled with light domestic demand has taken most of the production in the southeast although the government continued to release peanuts each week for crushing. Last week the government offered peanuts to produce approximately 4,000 tons of meal. Forty-five percent protein old process was lower at $51.50 per ton and solvent $48, f.o.b., Georgia and Alabama mills, February shipment.

Soybean Meal—Demand continued good from domestic sources and export inquiry also was quite active. Most processors have sold their production through February and some reported sold up through March. Prices were steady. Forty-four percent was offered at $50 per ton, Decatur, for February; $49, March through September shipment. Most of the Mississippi Valley production has been sold for February-March shipment but occasional lots were offered at $54 per ton, bulk, f.o.b., Valley points.

Waxes

Limited quantities of candelilla on spot combined with the uncertainty of getting replacements from Mexico as a result of drought conditions strengthened the market. This increased consumer interest and trading were quite active at prevailing quotations. Trading in carnauba grades was still restricted to small lots for actual needs. Prices were unchanged, but increased selling pressure has unsettled the spot market while replacements from Brazil continued strong. Most carnauba grades were unchanged, except yellow Parnahyba, which dropped 4c. following the decline in Ceara the previous week. Yellow Ceara ranged from $1.38 to $1.40 per pound, spot as to quantity and Parnahyba, $1.40 to $1.42 per pound same basis. Japan wax continued unsettled and stocks on spot were lower at 45c. to 46c. per pound, according to quantity and at 44c. for arrival shortly. Crude beeswax on spot also was easy and African and crude was lower at 69c. per pound, for ton lots.

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RAYMOND 6 ROLLER HI SIDE MILL

- Model 6669
- 200 HP Main motor
- 100 HP Fan Motor
- Separator, Furnace, Fans Cyclone, Electric Controls

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AIR COMPRESSOR, 1.R. x RE-2, 1500 CFM, 100 PSI. West. 250 H.P. Sync. 2200V Complete.

BIRD CONT. CENTR., 18"x28", S.S. 317.
HEAT EXCHANGERS, (2) Monel, 150 Sq. Ft.
HOMOGENIZER, Marco Kombinator S.S. Model 500.
KETTLES, S.S. Jack. Agit., 5, 10, 50 Gals.
MIXERS, Day 12 Gal., D. A. Sigma Jack.

S.S. 304 Bubble cap tower, 20" dia., 24 plates, 10" spacing, all S.S. preheaters 84 sq. ft., condensers 383 sq. ft., complete with piping, controls, pumps, panel board.

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Baker Perkins Heavy Duty 300 Gal. Size 18 Mixer 100 Gal. and 200 Gal. too.

Shriver 36" Jacketed C.I. Filter Press; Seco closure.

Tolhurst 40" Suspended Type Rubber Covered Centrifuge Monel Plow; Bottom Discharge.

Blaw Knox Stainless Resin Autoclave 7'6" x 7'6"; Dowtherm Jacketed and Agitated.

Pfaudler Glass Lined Jacketed Reactors; 500 Gal.; 1000 Gal.

Devine No. 23 Vac. Shelf Dryer 13 shelves 57" x 78"; double door complete with accessories.

Hersey Rotary Dryer; 5' x 26'; gas fired counter current; Stainless contact surfaces.

Raymond 2 stage Flash Drying System in Type 316 Stainless 1000 lbs. evaporation per hr.

Sharples C27 Super-D-Hydrator in Type 316 S.S.; 30 HP XPL.

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3—Link Belt Roto-Louvre 11'6"x36', 7'5"x20', 5'2"x20'.
1—Hersey 1½'x12' Rotary Hot Air 304 S.S. with steam coils.
1—Buflovak 2'x4' double drum Vacuum.
1—Buflovak 6'x5'6" Monel single drum Flaker.
4—Stokes single door Vacuum Shelf with 8—44"x40" shelves.
3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
4—Tray Dryers, steam heated, 95 sq. ft. tray area.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
3—Louisville Rotary Steam Tube 38"x25', 6'x40', 6'x50'.
6—Bartlett & Snow Rotary Dryers 6'x30', 7'x30', 8½'x35'.

MIXERS

2—Baker Perkins 100 and 50 gal., 316 S.S.. Sigma Blades.
5—Day "Cincinnatus" double arm 250 and 100 gals.
5—Steel jacketed Powder 50, 225 and 350 cu. ft.
1—Struthers-Wells 6'x9', 304 S.S. Rotating, jacketed.
1—Robinson 48"x7'6" long, 304 S.S. jacketed Powder, 90 cu. ft.
1—4' dia., 304 S.S. Conical Blender, 3 HP motor.

MILLS

1—Devine 5'x10' steel jacketed Ball Mill.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
1—National 6"x12" Two-Roll Mill, motor driven.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven, NEW.

CENTRIFUGES

2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50". 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
2—Bird 18"x28", 36"x50" steel, continuous, solid bowl.
2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP XP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Fletcher 30" center slung 304 S.S., Perforated basket.

KETTLES, REACTORS, CONDENSERS, EVAPORATORS, TANKS

2—500 gal. 347 S.S. jacketed, agitated Reactors 300# int. pressure, 75# jacket pressure.
1—750 gal. nickel clad, jacketed, agitated Reactor, 75# pressure.
1—Pfaudler 500 gal. glass lined, jacketed, agitated Reactor, 75# pressure.
5—500 gal. 316 S.S. closed, jacketed Tanks.
1—3500 gal. 304 S.S. Horizontal Tank 5'6" dia. x 16' long.
3—Unused 2500 gal. Vertical rubber lined Tanks 7'x9'.
3—12,000 gal. Aluminum Tanks 10'6" dia. x 20' high.
1—10,000 gal. Aluminum Tank 10'x16', ½" shell, 25# W.P.
2—10'x30', 8'6"x25' Steel Horizontal Storage Tanks.
2—Kellogg Admiralty Tubes 2200 and 1800 sq. ft.
2—Struthers-Wells 536 sq. ft. Heat Exchangers 304 S.S.
1—Struthers-Wells 536 sq. ft. Heat Exchanger 304 S.S.

FILTERS

1—Oliver 8'x10' Monel Rotary Vacuum.
1—Eimco 18"x12", 316 S.S. Rotary Vacuum.
2—Feinc 3'x1', 316 S.S. Rotary Vacuum with vacuum and receiving Tanks.
1—Feinc 5'x3' Monel Rotary Vacuum String.
1—Oliver 5'3"x8' Steel Rotary Vacuum, totally enclosed.
1—Niagara 230-32 Pressure Filter, 230 sq. ft., 304 S.S.
1—Niagara #95-36 Pressure Filter, 92 sq. ft., 304 S.S.
2—#3 Sweetland Filters 304 S.S., 12-25" dia. leaves. 75 sq. ft.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS

10—Orville Simpson Rotex Sifters 60"x84", 40"x84".
6—Robinson, Sprout Waldron, 304 S.S. Sifter, 40"x84" single deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
1—Stokes #21J, 304 S.S. Granulating Mixer, NEW.
10—Nash Vacuum Pumps H7, H6, H5, L5, L4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
15—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 5".

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Chemical Plant Equipment

1—600 gal. T317 St. St. Tank, ¼", ASME 15# Pr.

1—300 gal. T304 St. St. Tank, ¼".

1—170 gal. T316 St. St. Tank ¼" & ½", ASME 15# Pr.

1—135 sq. ft. Heat Exchanger T316 St. St., ASME 50# Pr.

2—Hills-McCanna K3M-2F Two Feed Metering Pumps, 3" x 3" and 5" x 3".

2—Lawrence T316 St. St. Sump Pumps, 5" x 4", 200 GPM.

1—Shriver 24" x 24" Filter Press, 15 ch.

1—Blaw-Knox K-15-600 Gas Cleaner, ASME 600# Pr.

1—Ozark-Mahoning Submerged Combustion Evaporator, 2,800.00 BTU/hr., type 316 St. St., with 1150 gal. T316 Evaporator Tank, 26" dia. x 62' T316 Stack, Air Blower and Gas Pump with motors, T316 Burners, controls, etc.

FROM CLOSED BAKERY

1—Mikro Pulverizer #3TH.

7—7 bbl. Dough Mixers.

4—5 bbl. Dough Mixers.

11—100 gal. Beater Mixers, Jacketed.

7—50 gal. Beater Mixers, Jacketed.

1—50 gal. Baker Perkins Double Shaft Beater Mixer, 5 HP.

1—30 gal. Hottman double shaft ribbon mixer with high speed knives, 25 HP.

1—Two Roll Saw Tooth Crusher, 8" x 18" long.

2—Spencer Turbo Compressors 350 cfm @ 32 oz. with carburetors.

4—R. C. Pos. Blowers 10"x15" and 8"x21".

Dextran and Alcohol Equipment from Syrup and Sugar plant

2—Horiz. Oval Stainless Steel Closed Tanks, 2000 gal. & 2500 gal.

1—350 gal. Vertical Stainless Jacketed Tank with Agitator.

3—500 gal. Pfaudler Stainless Steel Jacketed and Agitated "Super-Mixer" Tanks.

3—A. L. Anderson Vacuum Drying System, made of Stainless Steel (2—Type 316; 1—Type 304). Has (6) Stainless Steel shelves approximately 3' x 6' with individual doors and vacuum connections for each shelf; with vacuum pump and motors.

2—DeLaval Model BUH-3930 Hermetic Clarifiers (Separators) Serial Nos. 3519628, 29 (with 3 HP motors). St. St. bowls.

1—Carter & Nansen design Copper Bubble Cap Alcohol Still 36" diameter x 35 plates, with preheater and condenser. (To produce 200 gallons of 95% by vol. alcohol from aqueous feed containing 50% alcohol.)

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54" x 6' Autoclave, jktd. 30 PSI, NEW.
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6800 CFM Blower, 2 PSI, 85 HP.
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36" x 50" Bird Cont. Centrifuge.
40" SS Bird Sus. Perf. Centrifuge.
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6' x 17'10" Everdur Column.
3' x 14' x ¼" steel Column, 75 PSI.
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502-16 L. B. Roto Louvre Dryers, SS.
8'6"x35' Rotary Dryer.
7'0"x30' Rotary Dryer.
6'6"x30' Rotary Dryer.
24" Filter Press 35 chambers, wash.
243D Stokes Oscill. Granulator.
6'x48" Hardinge Pebble Mill.
Jeffrey Hammermills, 15 x 8, 20 x 12.
Micro Pulverizers 2TH & 1W Bantam.
140 cu. ft. Paddle Mixer (NEW).
12" Dia. L. B. Twin Shaft Paddle Mixer.
412G Stokes Microvac Pump (NEW).
2000 gal. Reactor, 200 PSI.
18" Gayco Cent. Separators.
4'x15' Tyler Single Deck Screen.
3'x15' Tyler Single Deck Screen.
4' x 10' L. B. Vibrating Screen 2 Deck.
28A Robinson Gyro Sifter, SS.
1300 gal. Glass-Lined Tank.
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International 8' x 8' Porcelain Lined Pebble Mills; 50 HP.

Patterson Buhrstone Lined Pebble Mills; 5' x 8'; 6' x 5'; 6' x 8'.

Abbe Porcelain Lined Pebble Mills; 36" x 42"; 2 HP motor.

Gates and Smidth Tube Mills; 5' x 20'; 5' x 22"; steel liners.

Hardinge Conical Ball Mill; 10' x 48"; Titanite Liners.

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1—#2, 23 copper leaves, 1½" c.c.
2—Day 15 gal. Pony Mixers, m.d. S.S. cans.
2—Stainless Steel Hersey Rotary Dryers. 5'x26' and 6'x23'.
2—8'x125' Rotary Kilns.
1—#5057 Raymond High Side Roller Mill.
1—Day #30 Imperial jack. Mixer, 75 gal.
9—Sperry 18"x18" Filter Presses, 11 ch.
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PEBBLE MILLS, 18x18, 24x24, 24x36, 30x24, 30x30, 36x48, 54x48, 4'x5', 6'x5', porcelain lined, 6x8 Buhrstone.

BALL MILLS, 6'x22", Hardinge Conical 5'x 22' tube, Hardinge conical 4'x16", 7'x 22", 7'x48" Buhrstone.

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MIXERS, Lightnin portable, 1 cu. ft. cone, 5 cu. ft. Lancaster, EAG 3, EAG3, & 9 cu. ft. EAG 4, Blystone 20 & 40 cu. ft

SCREENS 3x5 single (Universal), 3x10 double Tyler, 3x10 Cedar Rapids, 5x12 double Robbins.

ROTARY DRYERS, 3'x20', 39"x21', 44"x25", 6'x30. 6x40.

CONDENSOR, Stainless, Whitlock 12"x60', Bronze tube 30"x6' (660 sq. ft.).

COMPRESSORS, 1½HP Worthington, 3HP, 5HP, & 7½HP Westinghouse w air receivers motors & auto. controls.

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1—Buffalo Vac Drum Dryer. 24"x20"

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4—Tolhurst 40" Suspended Type.
6—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
Sparkler Stainless Filter Model 14-S-8.
#2 Sweetland Filter 12 Stainless covered leaves
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer 2'x1 Rotary Vac. Filter.
Sperry and Shriver 6" to 30" iron & wood. Sweetland & Oliver Filters.

KETTLES AND TANKS
Pfaudler 200 gal. Glass Lined Jack Kettle.
Dopp 350 gal. Agit. Jack Cl Vac Kettle.
2—Impreg Units 30" & 36" dia. complete.
6—Jack. steel Kettles up to 3000 gals.
2300 gal. vert. agit. Jack. Steel Kettle
1—250 gal. Lead lined Kettle.
Stainless, alum., copper. Glass lined, lead lined and steel kettles and tanks

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2—Mikro Pulverizers #2TH & #2SI.
Pebble Mills 24"x30", 30"x30", 30"x34", 30"x42", 4'x5' Also jar mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
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Schutz-O'Neill #1 & 20" Pulverizers.
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Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Attrition Mill
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills. 9" x32" 12"x30", 16"x40"
1—Monarch 9"x24' Steel Roller Mill 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S & Premier 1½ H.P Colloid Mills.

MIXERS, SIFTERS & SCREENS
Day Imperial 75 & 150 gal. Jack. Mixers.
Lancaster 6' dia. Vert. Mixer 25 HP
Kent 3 HP continuous dry mixer
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz spiral mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal double arm mixers.
Read 80 qt. vert. mixer, 3 speed.
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
13—Portable Elec Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

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Stokes & Kux 2½" dia. single punch Preform Machines. Also other sizes & Rotaries.
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3—Stokes and Day Powder Fillers.
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Baker Perkins 50 gal. Stainless Steel Steam Jacketed Heavy Duty Mixers with Stainless Jacketed Blades.
Gemco 30 cu. ft. Vacuum Double Cone Blender.
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1—Devine Rotary Vacuum Dryer, 5′ x 20′.

1—Wyssmont #R32 Turbo Dryer with Hersite covered trays (New).

3—Link Belt Steel Roto Louvre Dryers, Model 207-10, 310-16, 502-20.

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1—Buflovak 6′ Vacuum Pan Dryer.

4—Rubber-lined Storage Tanks, 200 to 1000 gal. (New).

2—Horizontal Aluminum Storage Tanks, 20,000 gal. ea.

3—Stainless Steel Storage Tanks, 3000 gal. each.

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1—Chicago Bridge Hortensphere, 4500 gal., 200 PSI.

5—Pfaudler Glass-lined Jacketed Reactors, 300 gal. ea.

1—AT&M TYPE 316 Stainless Steel Suspended Type Centrifugal, complete with 18″ perforated basket.

2—Stokes Stainless Steel Revolving Vacuum Dryers, 3′ x 10′.

1—Bird Stainless Steel Suspended Type Centrifuge, complete with 40″ perforated basket.

3—AT&M Suspended Type Centrifuges, complete with 30″ Imperforated baskets.

1—Baker Perkins Type 316 Stainless Steel Multimatic Centrifugal Filter, Model HS-24″.

1—Niagara Type 316 Stainless Steel Jacketed Filter, Model 45-30.

1—Oliver Rotary Vacuum Filter 3′ x 2′, Rubber Covered.

1—Oliver Rotary Vacuum Filter 3′ x 6′, Rubber Covered.

1—Oliver Type 304 Stainless Steel Precoat Filter, 3′ x 6′ (New).

10—Sweetland #12 Filters with 72 Stainless Steel leaves.

1—Sweetland #7 with 48 copper leaves.

13—Stokes Model F Tablet Machines.

2—Stokes Model R Tablet Machines.

1—Allis Chalmers Rotary Dryer, 7′ x 64′ 6″.

1—Stokes DDS2 Rotary Tablet Machine.

1—Vulcan Steel Bubble Cap Column, 42″ x 30′, with 20 trays New.

1—Vulcan Steel Bubble Cap Column, 24″ x 30′ with 20 trays (New).

2—Sharples Type 316 Stainless Steel Centrifuges, Model D-2 (New).

1—Vulcan Steel Bubble Cap Column, 18″ x 25′ with 17 trays.

2—Ames 500 HP Steam Generators, 125 PSI.

1—Baker Perkins Type 4AN Laboratory Mixer.

10—Baker Perkins 100 gal. Sigma Blade Jacketed Mixers.

5—Simpson #0 Intensive Mixers (New).

1—Raymond High Side 6-roll Mill, complete.

7—Swenson Walker Steel Jacketed Crystallizers, 20′ long.

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UNION, NEW JERSEY — Est. 1886 — MUrdock 6-4900

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1—Stainless Tank #430 Chrome, vert. 7′x10′ deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Copper Evaporator, steam jacketed, 9′1″x3′9″.
60—New Pressure Cookers, 18″x18″ & 24″x28″.
1—New Glass Nash Centrifugal Pump, 160gpm.
1—New Nash Vacuum Pump Type AL-372.
1—Buflovak Jacketed Impregnating Tank 42″x52″.
1—Stedman Disintegrator size 40-6.
1—Abbe Ball Mill, 36″x42″ Buhrstone lined.
#316 Stainless Steel Tanks, new. 100, 200 & 360 gal.
1—Nash Air Compressor, Type AL-623.
1—Manton Gaulin Stainless Homogenizer 125 gph.
1—I&R Vacuum Pump, 5 H.P., 60′.
4—Heat Exchangers, 12″ dia. 11′ lg., 43 steel tubes.
1—Stokes Single Punch Tablet Machine.
1—Raymond 8″ Hammer Mill, like new
2—Louisville Steam Tube Dryers 6′x35′.
1—New Louisville Continuous Filtering Machine.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor, 265 gals. cap., jacketed.
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1—#10 Day 300 gal. Jacketed Sigma Blade Mixer.
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POSITION WANTED

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Chemical Salesman: experienced in pigments, aniline dyes lacquers, chemical specialties and chemical finish coatings. Ten years' experience in sales, sales service, laboratory and production. Own car. Desires position in metropolitan area. OPD 245.

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Turkey Gets ICA Funds

International Cooperation Administration last week issued authorizations to Turkey to purchase $566,000 of medicinal and pharmaceutical preparations to be financed by ICA. Purchases will be made under PA No. 77-370-99-01-7211 and D6-7212, from world sources.

Mineral Production Hit Peak in Past Year

—Continued from page 7

a pound in February, a level it held until July. Then a sharp dip to 36 cents occurred and by year-end some operators were curtailing output.

• Operating at high capacity in the last months of the year, the steel industry managed to fill most demands, despite the month-long midsummer strike. Iron ore output, though down 8 percent, was aided by extending the Great Lakes ore fleet-shipping season two weeks.

• Output of nearly all the nonmetals increased along with growth and stepped-up activity in the construction, chemical, ceramic, and fertilizer industries. Major gains were in the aggregate industries and phosphate rock. Higher phosphate rock production reflected continued demand for fertilizer materials and the industry's recovery from strikes which had curtailed 1955 output.

Approximately 700 uranium mines produced nearly 3 million tons of ore in 1956, from which an estimated 6,000 tons of uranium oxide were recovered. As of November 1, uranium ore reserves were estimated at 60 million tons, of which 68 percent was in New Mexico and the rest was in Utah, Colorado, Arizona, and Washington.

Combined production capacity of the nation's twelve uranium mills was nearly 9,000 tons of ore a day. The estimated output of 6,000 tons of uranium oxide compares with 1,600 tons produced in the last six months of 1955.

Ilmenite Up 5 Percent

Domestic production of the titanium mineral ilmenite is estimated to have risen 5 percent over 1955 to about 610,000 short tons, and ilmenite imports held near the 1955 level. However, a rising demand and high prices boosted domestic output of rutile—only commercial source of titanium metal—40 percent to about 12,000 tons, and imports in the first nine months were 160 percent greater than in the comparable 1955 period, establishing a record of 37,458 short tons.

Titanium sponge metal production was estimated at nearly double that of 1955, totaling about 14,500 short tons. Mill product output skyrocketed from 1,800 short tons in the previous year to about 5,500 short tons in 1956. Increased efficiencies, achieved through greater production, made it possible to reduce titanium sponge metal prices from $3.45 a pound at the beginning of the year to $2.75 in December. At the same time, prices on some mill products dropped more than $2 a pounds.

Domestic production of bauxite, the ore of aluminum, is estimated by the bureau at 1.8 million long tons, approximately equal to 1955's output. A strike at the larger bauxite mines in August caused an estimated production loss of more than 100,000 tons. United States output in 1956 was about 23 percent of the total supply for consumption, compared with 25 percent in the three previous years.

Bauxite imports rose 15 percent to an estimated six million tons. Ore from Jamaica accounted for 50 percent of the imports, Surinam supplied 45 percent, and most of the rest was from British Guiana.

Primary aluminum production is estimated at a record 1.7 million tons during 1956, an increase of 7 percent from 1955. A strike in August closed down several plants and resulted in a loss of approximately 75,000 tons of primary output. By year's end production was at the rate of 1,780,000 tons annually.

Production of primary magnesium in the United States in 1956 came from the two electrolytic plants in Texas and a silicothermic plant in Connecticut. Although labor trouble closed the two large plants in Texas for a month during the summer, total output for the year was 10 percent above 1955, according to the bureau.

Copper Up 10 Percent

Output of copper at domestic mines increased 10 percent in 1956 and may have exceeded the all-time peak reached in 1942-43. Arizona continued as the leading copper-producer, followed by Utah, Montana, Nevada, New Mexico, and Michigan. New operations and freedom from strikes were chiefly responsible for the production gains.

Domestic manganese output is estimated as 14 percent above 1955. It was purchased largely by the government at premium prices.

Domestic production of molybdenum dropped as the grade of ore treated by the principal producer was lower. The United States continued to supply about 90 percent of world output. Domestic consumption and exports both were higher than in 1955.

Demand for chromite continued to expand. However, despite incentive prices, mine shipments of domestic chromite fell off and imports represented more than 90 percent of new supply.

Tungsten production capacity again exceeded industrial demand. To enable domestic producers to adjust operations to the market situation, the government authorized purchase of an additional 1.25 million short-ton units of tungsten trioxide at $55 a unit, lower than the previous premium price but well above open-market quotations.

Domestic mine production of lead increased 4 percent in 1956 over 1955, largely because there was less lost time due to strikes. Output of refined lead from domestic and foreign ores increased materially, as the lead smelters operated steadily in 1956.

Mine production of zinc increased about 5 percent, owing mainly to output from several new mines and from mines reopened during 1955 and 1956 that had previously shut down because of low prices. Some of the gains from these sources were offset by losses from strikes, mostly in New Jersey and Idaho.

Mercury production at domestic mines in 1956 continued the upward trend of the last five years and exceeded 1955 by 20 percent. Most of the increase resulted from new operations in Idaho and Alaska. Industrial consumption fell 15 percent from the preceding year, principally because less metal was used in the installation of chlorine and caustic soda plants and in electrical apparatus.

Fertilizer Materials Resumed Rise

Output of fertilizer mineral raw materials resumed its upward trend in 1956, recording an all-time high, the bureau said. Phosphate-rock production, estimated to be 10 percent greater than in 1955 when the Florida producers were shut down by a long strike, accounted for most of the increase. Potash production and value increased slightly. Continued expansion of facilities and production characterized the nitrogen compounds industry in 1956.

An important new advance in clay technology, the development of a low-cost catalyst from kaolin, was partly responsible for expanded production of this mineral.

The feldspar industry experienced increased competition from Canadian nepheline syenite, especially for use in glass containers. However, domestic output held steady. Early in 1956 a new plant, capable of producing 100,000 tons of processed nepheline syenite a year, began operating at Blue Mountain, Ontario.

Talc production climbed higher to meet continued demands for ceramic floor and wall tile.

Output of sheet and scrap mica remained about the same. Growth of the electronic and electrical industries and more rigid specifications kept demand for sheet mica at a high level.

Gypsum production gained slightly, but owing to the decline in home building, did not share the greater rise of many other construction materials. Imports increased and several new gypsum product plants began operating.

Barite consumption attained a new peak in 1956, substantially above the 1955 level. Needs were met by increases in both imports and domestic production, which also set a record. The major use was as drilling mud, and the industry looked forward to continued expansion to keep pace with the worldwide search for oil reserves.

Consumption of fluorspar climbed to a new high in 1956, causing domestic production and imports to rise. Both metallurgical- and acid-grade fluorspar were included in government purchase programs. A law enacted in July provided for purchase, during the next two and one-half years, of 250,000 tons of newly mined domestic acid-grade material at $53 a short dry ton. There was strong competition between importers and domestic producers.

Production of sulfur grew faster than sales, and stocks accumulated. Exports from Mexico had considerable effect upon the international market.

APMA Western Unit

—Continued from page 7

Other's Toes," by Tobias Wagner, of Smith, Kline & French Laboratories; and "Coordinating Samples, Promotion and Sales When Launching a Net Product," by Thomas Winn, of the J. B. Roerig & Co. division of Chas. Pfizer & Co.

The program will close with a panel discussion, of which Kenneth Valentine will be the moderator. Members will include: Tobias Wagner, Thomas Winn, Tyler MacDonald, and Richard Steuben.

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Doeskin Acquires Keta From Swan-Finch Gas

Doeskin Products Inc., New York, has purchased Keta Gas & Oil Company from Swan-Finch Gas Development Company.

Doeskin, which is a maker of facial tissues and other paper products, acquired Keta by issuing shares of previously authorized but unissued common stock to Swan-Finch Gas. Exact cash value of the deal, consummated December 31, cannot be determined until next Thursday (January 31) under terms of the purchase pact.

As a result of the transaction, Swan-Finch Oil Co., parent of Swan-Finch Gas, and owners of controlling interest in Doeskin, will own directly or control substantially more than 50 percent of Doeskin common.

Coatings Materials

—Continued from page 59

seasonal production to 1,003,560 drums, which was 21,000 less than in the same period of 1955. Turpentine stocks held by Commodity Credit Corporation declined from 25,140 barrels on November 30, 1956 to 11,360 barrels on December 31. While this resulted in an increase in the miscellaneous category, total gum turpentine stocks decreased about 2,500 barrels during December.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Jan. 18	Mon. Jan. 21	Tues. Jan. 22	Wed. Jan. 23	Thur. Jan. 24
Drums—					
D	...	...	$8.25	...	...
K	$8.15	$8.20	...	...	...
N	...	8.12	...	$8.15	...
WG	...	8.65§	8.60	8.54	...
WW	...	8.97§	8.95	8.90	$8.93
Bags—					
G	...	...	...	7.90	...
K	8.05	...	...	...	...
M	...	...	...	...	7.93
WW	...	...	...	...	8.46

Tankcars (for week ended January 18)—M or better, $7.85; K or better, $7.93

Sales, USDA

361* 543* 400* 890* 265*

New York

(per 100 lbs., c.l., Friday)

WW, $10.40; WG, $9.70; N, $9.60; B through M, $9.35

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.585	.585	.59	...	...
Sales	8,000¶	8,000¶	4,600¶	...	...

New York, Friday, per gal. 7 lbs., tankcars, 67c., l.c.l. 82c.

* Drums equivalent. ¶ Gallons. § Average price.

Butadiene Plant

—Continued from page 3

bill merely requires that for the next ten years the plant shall be available for production of one or more chemicals important to the national security if needed by the government.

By making the plant available for general chemical production, the government believes that it will be able to get a better price for it than when it could be offered only for continued butadiene production.

Union Carbide & Carbon Corporation, New York, offered $3.5 million for the plant when it was up for sale last year. Officials believe they will receive an even better offer when bids are again called for.

a Quiz that may save your life

Q. What is cancer?
A. An uncontrolled growth of cells. If permitted to spread through the body, it inevitably leads to death.

Q. Can cancer be cured?
A. Many types can be cured, but only if they are discovered and treated early.

Q. How can cancer be discovered in time?
A. By your doctor who has available many diagnostic tests.

Q. What is the American Cancer Society?
A. The only national voluntary agency which fights cancer by research, education and service to cancer's victims.

Q. What has it accomplished?
A. It helped save an American from dying of cancer on an average of every seven minutes last year.

Q. Does that mean it has solved the cancer problem?
A. Unfortunately, no. Despite the advances made, more than 235,000 Americans will die of cancer this year.

Q. Can I help to prevent this tragedy?
A. Yes. By having regular health examinations yourself. And by contributing to The American Cancer Society.

Q. What will my contribution be used for?
A. For research that may some day save your life, for education and for helping cancer's victims.

Strike back at cancer...man's cruelest enemy...Give

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Dye Intermediates	Pharmaceuticals
Explosives	Photochemicals

Selective Solvents

Now, complete physical properties of aniline are presented in Cyanamid's new eight-page data book. Particularly interesting to those using aniline is the detailed section on "Analytical Test Methods."

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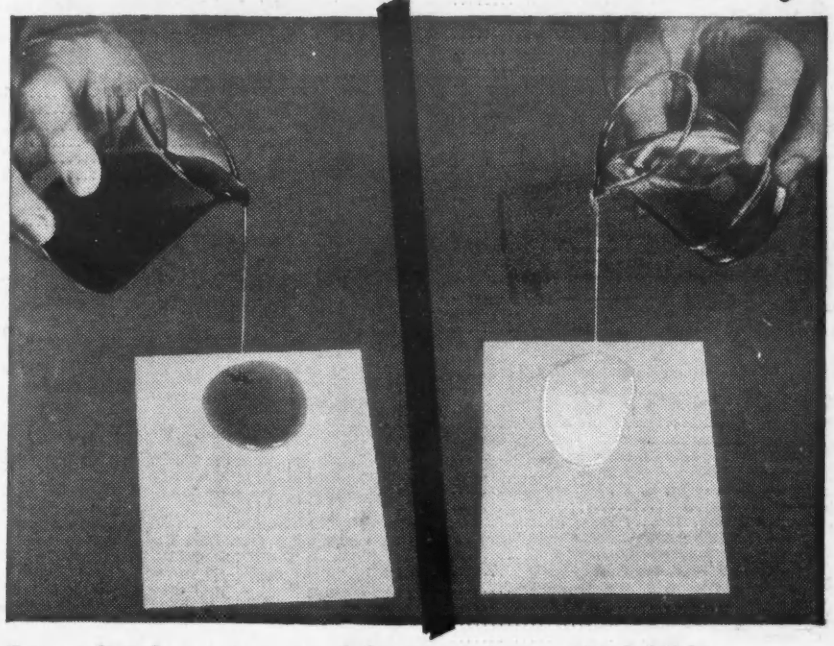

Even after long storage, Celanese Solvent 601 inhibits discoloration of nitrocellulose lacquers

After twenty-five weeks in jars containing steel balls, lacquer on right, containing 12% of Celanese Solvent 601, shows little or no discoloration. Lacquer on left, containing standard solvents, shows marked discoloration.

Color stability is just one of the reasons why you should consider CS 601 as a low-cost replacement for MEK in either vinyl or nitrocellulose formulations. In solvent power, evaporation rate and other working properties, it is interchangeable with MEK.

Write for new technical bulletin to Celanese Corporation of America, Chemical Division, 180 Madison Ave., New York 16.

Celanese® CHEMICALS

Celanese®

EXPORT SALES: Amcel Co., Inc. and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N.Y.

"CACHALOT" fatty alcohols as additives and reactants open new vistas to chem-men

Brand name is guide to uniform tonnage

Higher aliphatics now cost less

Right now you may be paying more for a raw material to do a job that fatty alcohols can do better and cheaper. Current research discloses brand new uses for straight-chain fatty alcohols: oil additives, plasticizers, polymerization agents, anti-oxidants, to name but a few.

Established Source

Today, uniform tonnage lots of low cost long-chain alcohols are a reality: CACHALOT brand lauryl, cetyl, stearyl, and oleyl alcohols are the result of over thirty years of original production research in higher alcohols.

Close Control

Made to tight specifications by modern techniques of high pressure hydrogenation and vacuum distillation, the uniformity of CACHALOT fatty alcohols pays off in cleaner reactions, no formula-juggling, quality end-products.

Large Variety

You can choose the grade that exactly meets your needs from the more than eighteen basic types of CACHALOT monohydric, normal alcohols with even-numbered carbon chains from 12 to 18. Or set up your own specifications for custom blends of saturated and unsaturated alcohols. Either way, CACHALOT fatty alcohols are available in big tonnage at competitive prices.

Adequate Supplies

Available for prompt shipment, all grades (NF, USP, TGA, and technical) are clean-packed: flaked or cast cetyl and stearyl alcohols in polyethylene lined cartons or multiwall bags; clear liquid lauryl and oleyl alcohols in uniform weight steel drums; bulk quantities in steam-cleaned coiled tank cars.

News for P.A.'s

A fact file keyed to your industry—full of data on these versatile chemicals—is available to you or your researchers. You are invited to write or phone for your copy (NYC: DIgby 4-3878). CACHALOT is the registered trade name of M. Michel and Company, Inc., over three decades a basic supplier to chemical manufacturers.

MICHEL

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